



# Cisbio Product Catalog

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Science is challenging. It deserves assays you can trust.

April 2019 - 6<sup>th</sup> edition





Helping your screening success story continue

Inspiring therapeutic discoveries for thousands  
of TR-FRET users worldwide

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# HOMOGENEOUS TIME R

- Accelerate your



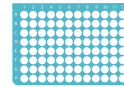
Easy to implement



Time saving



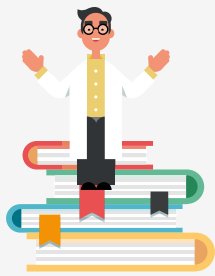
Enhanced Sensitivity



Microplate based -technology



Multiple reads



**1800**

scientific papers published with HTRF assays

A technology recognized by researchers for

**20** years

Format flexibility

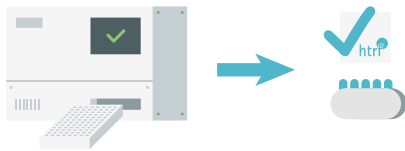
**200** & **400**

Biochemical assays

Cell-based assays

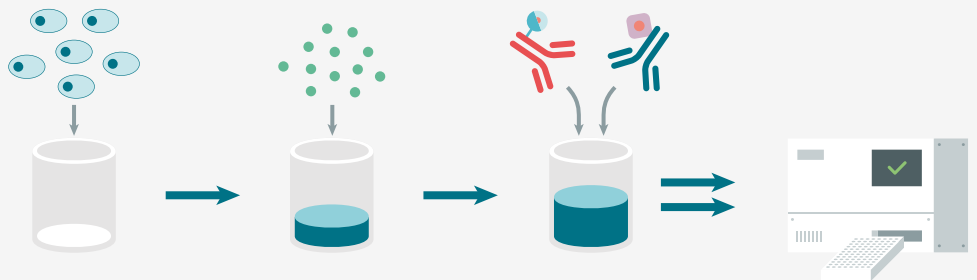


**40**



More than 40 HTRF-suitable microplate readers

The fastest way to results



Microplate-based (96- to 1536- wells) / Minimum dispensing steps / Add & Read, no washes

# ESOLVED FLUORESCENCE

projects with HTRF® -



No wash required



Relevant and trusted results



Robustness



Scalable



High specificity

## 8 Major indications

We expand research possibilities for a growing number of applications.



Get HTRF® essentials in pages 39

# Phosphorylation

cellular assays

## Features & applications

- < 1 hr bench time
- Cell-based assays
- Compatible with cell lysates, tissue extracts, xenografts, iPS cells, 3-D cell models
- 16  $\mu$ L sample
- More sensitive than Western Blot
- Pharmacological studies of pathway inhibitors, agonists, and allosteric modulators

## Pathway readouts

- MAPK/ERK signaling
- MAPK/JNK signaling
- MAPK/p38 signaling
- EGF/ErbB signaling
- PI3K/AKT/mTOR signaling
- JAK/STAT signaling
- NF- $\kappa$ B signaling
- Translational control
- Cell cycle
- Apoptosis
- Angiogenesis
- Immune cell signaling (TCR, BCR, Toll-Like Receptors, STING)



Cisbio's cellular protein phosphorylation assays offer a rapid and streamlined alternative to more conventional technologies such as Western Blot, ELISA, or other luminescent assays. Our assays provide the sensitivity required to detect endogenous and basal levels of phosphorylated proteins in samples.

Discover our 96-well kit format, including the Cisbio 96-low-volume plate, for simple pathway investigation and easy pipetting.

**Unleash the potential of your phosphorylation research with HTRF**

Visit Cisbio's Youtube channel



## Phospho- and total protein cell-based assays

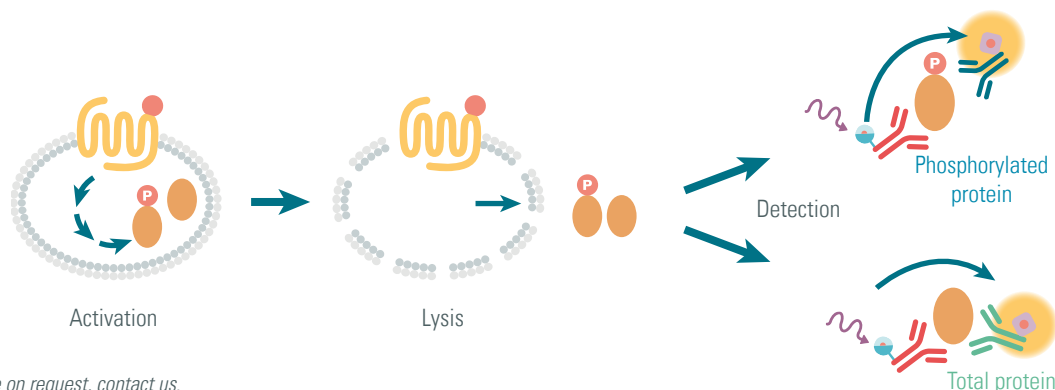
A full line of ready-to-use assays for measuring phosphorylation levels and the total expression of intracellular proteins.

| Product                                     | Size       | Part #      |
|---|------------|-------------|
| Alpha-Tubulin Housekeeping kit              | 500 tests  | 64ATUBPEG   |
| Alpha-synuclein phospho-S129 kit <b>NEW</b> | 500 tests  | 6FSYNPEG    |
| Alpha-synuclein total kit <b>NEW</b>        | 500 tests  | 6FNSYPEG    |
| 4EBP1 phospho-T37/46 kit                    | 500 tests  | 64BP1PEG    |
| ACC phospho-S79 kit                         | 500 tests* | 64ACCPEG    |
| AKT phospho-S473 kit                        | 500 tests* | 64AKSPEG    |
| AKT phospho-T308 kit                        | 500 tests  | 64AKTPEG    |
| AKT total kit                               | 500 tests* | 64NKTPEG    |
| AKT1 phospho S473 kit                       | 500 tests  | 63ADK078PEG |
| AKT1 total kit                              | 500 tests  | 63ADK079PEG |
| AKT2 phospho S473 kit                       | 500 tests  | 63ADK080PEG |
| AKT2 total kit                              | 500 tests  | 63ADK081PEG |
| AKT3 phospho S473 kit                       | 500 tests  | 63ADK082PEG |
| AKT3 total kit                              | 500 tests  | 63ADK083PEG |
| AMPK phospho-T172 kit                       | 500 tests* | 64MPKPEG    |
| AMPK total kit                              | 500 tests  | 63ADK060PEG |
| ATF2 phospho-T71 kit                        | 500 tests  | 63ADK015PEG |
| BAD phospho-S112 kit                        | 500 tests* | 64BADPEG    |
| Beta Catenin phospho-T41/ S33/37 kit        | 500 tests  | 64CATPEG    |
| Beta Catenin total kit                      | 500 tests  | 64NCAPEG    |
| BTK phospho-Y223 kit                        | 500 tests  | 63ADK017PEG |
| BTK total kit                               | 500 tests  | 63ADK064PEG |
| cJun phospho-S63 kit                        | 500 tests  | 64JUNPEG    |
| cRaf phospho-S338 kit                       | 500 tests  | 63ADK018PEG |
| CREB phospho-S133 kit                       | 500 tests* | 64CREPEG    |
| CREB total kit                              | 500 tests  | 63ADK052PEG |
| c-Src phospho-Y419 kit                      | 500 tests  | 64SRCPEG    |
| c-Src total kit                             | 500 tests  | 64NSRPEG    |
| EGFR phospho-pan kit                        | 500 tests  | 64HR1PEG    |
| EGFR phospho-Y1068 kit                      | 500 tests  | 64EG1PEG    |
| EGFR total kit                              | 500 tests  | 64NG1PEG    |
| EIF2 alpha phospho-S52 kit                  | 500 tests  | 64EF2PEG    |

| Product                             | Size       | Part #      |
|-------------------------------------|------------|-------------|
| EIF2 alpha total kit                | 500 tests  | 64NEFPPEG   |
| EIF4E phospho-S209 kit              | 500 tests  | 64EF4PEG    |
| ERK phospho-T202 /Y204 Advanced kit | 500 tests* | 64AERPEG    |
| ERK phospho-T202/Y204 kit           | 500 tests* | 64ERKPEG    |
| ERK total kit                       | 500 tests  | 64NRKPEG    |
| FAK phospho-Y397 kit                | 500 tests  | 64FAKPEG    |
| FAK total kit                       | 500 tests  | 64NAKPEG    |
| FGFR2 phospho-Y653/654 kit          | 500 tests  | 63ADK054PEG |
| FGFR2 total kit                     | 500 tests  | 63ADK057PEG |
| FoxO1 phospho-S256 kit              | 500 tests  | 64FOXPEG    |
| FoxO1 total kit                     | 500 tests  | 64NFOPEG    |
| GSK3 alpha phospho-S21 kit          | 500 tests  | 64GPAPEG    |
| GSK3 alpha total kit                | 500 tests  | 64GTAPEG    |
| GSK3 beta phospho-S9 kit            | 500 tests  | 64GPBPEG    |
| GSK3 beta total kit                 | 500 tests  | 64GTBPEG    |
| H2AX phospho-S139 kit               | 500 tests  | 64H2XPEG    |
| HER2 phospho-Y1221/1222 kit         | 500 tests  | 64HR2PEG    |
| HER2 total kit                      | 500 tests  | 64NR2PEG    |
| HER3 phospho-Y1289 kit              | 500 tests  | 64HR3PEG    |
| HER3 total kit                      | 500 tests  | 64NR3PEG    |
| Histone H3 phospho-S10 kit          | 500 tests  | 64HH3PEG    |
| Histone H3 phospho-T3 kit           | 500 tests  | 63ADK061PEG |
| Histone H3 total kit                | 500 tests  | 64NH3PEG    |
| IKKB phospho-S177/181 kit           | 500 tests  | 64KKBPEG    |
| IKKB total kit                      | 500 tests  | 63ADK097PEG |
| IRAK3 total kit <b>NEW</b>          | 500 tests  | 63ADK101PEG |
| IR beta phospho-Y1150 /1151 kit     | 500 tests  | 63ADK016PEG |
| IR beta total kit                   | 500 tests  | 63ADK019PEG |
| IRF3 phospho-S386 kit               | 500 tests  | 6FRF3PEG    |
| IRS1 phospho-Ser312 kit             | 500 tests  | 64IRSPEG    |
| IRS1 total kit                      | 500 tests  | 64NRSPEG    |
| IRS2 total kit                      | 500 tests  | 64IRTPEG    |

Also available under 10 000 tests and \*96 tests  
Control lysates for each kit are available separately.

Run your assay in less than 2 hours.



Bulk size available on request, contact us.

| Product                                | Size       | Part #      |
|--|------------|-------------|
| JNK phospho-T183/Y185 kit              | 500 tests  | 64JNKPEG    |
| LRRK2 phospho-S935 kit                 | 500 tests  | 6FLRKPEG    |
| LRRK2 total kit                        | 500 tests  | 6FNRKPEG    |
| MEK1 phospho-S218/222 kit              | 500 tests  | 64ME1PEG    |
| MEK1 phospho-S298 kit                  | 500 tests  | 63ADK021PEG |
| MEK1 total kit                         | 500 tests  | 64NE1PEG    |
| MEK1/2 phospho-S218/222 kit            | 500 tests  | 64ME2PEG    |
| MNK phospho-T197/202 kit               | 500 tests  | 63ADK022PEG |
| mTOR phospho-S2448 kit 500 tests       | 500 tests  | 64TORPEG    |
| NDRG1 phospho-S330 kit                 | 500 tests  | 63ADK093PEG |
| NDRG1 phospho-T346 kit                 | 500 tests  | 63ADK092PEG |
| NDRG1 total kit                        | 500 tests  | 63ADK094PEG |
| NFκB phospho-S536 kit                  | 500 tests* | 64NFBPEG    |
| NFκB total kit                         | 500 tests  | 64NFTPEG    |
| P38 phospho-T180/Y182 kit 500 tests    | 500 tests* | 64P38PEG    |
| P53 phospho-S15 kit                    | 500 tests* | 64P53PEG    |
| P53 total kit                          | 500 tests* | 64T53PEG    |
| p70S6K phospho-T389 kit                | 500 tests  | 64S6KPEG    |
| PDGFR beta phospho-Y751 kit <b>NEW</b> | 500 tests  | 64PDGPEG    |
| Phospholamban phospho T17 kit          | 500 tests  | 63ADK074PEG |
| Phospholamban total kit                | 500 tests  | 63ADK075PEG |
| RB phospho-S780 kit <b>NEW</b>         | 500 tests  | 64PRB1PEG   |
| RB phospho-S807/811 kit <b>NEW</b>     | 500 tests  | 64PRB2PEG   |
| RB total kit <b>NEW</b>                | 500 tests  | 64NRBPEG    |
| S6RP phospho-S235/236 kit              | 500 tests  | 64RP6PEG    |
| SHP1 phospho-Y564 kit <b>NEW</b>       | 500 tests  | 64SH1PEG    |
| SHP1 total kit <b>NEW</b>              | 500 tests  | 64NH1PEG    |
| SHP2 phospho-Y542 kit <b>NEW</b>       | 500 tests  | 64SH2PEG    |
| SHP2 total kit <b>NEW</b>              | 500 tests  | 64NH2PEG    |
| SLP-76 phospho S376 kit                | 500 tests* | 63ADK076PEG |

| Product                               | Size       | Part #      |
|---------------------------------------|------------|-------------|
| SLP-76 total kit                      | 500 tests  | 63ADK077PEG |
| SMAD1 phospho-S463/465 kit            | 500 tests* | 63ADK062PEG |
| SMAD1 total kit                       | 500 tests  | 63ADK063PEG |
| SMAD2 phospho-S465/467 kit <b>NEW</b> | 500 tests  | 63ADK102PEG |
| SMAD2 total kit <b>NEW</b>            | 500 tests  | 63ADK103PEG |
| SMAD3 phospho-S423/425 kit            | 500 tests  | 63ADK025PEG |
| SMAD3 total kit                       | 500 tests  | 64ND3PEG    |
| STAT1 phospho-Y701 kit                | 500 tests  | 63ADK026PEG |
| STAT1 total kit                       | 500 tests  | 63ADK096PEG |
| STAT3 phospho-Y705 kit                | 500 tests* | 62AT3PEG    |
| STAT3 total kit                       | 500 tests  | 64NT3PEG    |
| STAT5 phospho-Y694 kit                | 500 tests  | 64AT5PEG    |
| STAT6 phospho-Y641 kit <b>NEW</b>     | 500 tests  | 64AT6PEG    |
| STING phospho-S366 kit <b>NEW</b>     | 500 tests  | 64STGPEG    |
| STING total kit <b>NEW</b>            | 500 tests  | 64NTGPEG    |
| Tau phospho-S202/T205 kit <b>NEW</b>  | 500 tests  | 64TS2PEG    |
| Tau phospho-S404 kit <b>NEW</b>       | 500 tests  | 64TS4PEG    |
| TBK1 phospho-S172 kit <b>NEW</b>      | 500 tests  | 64TBKPEG    |
| TBK1 total kit <b>NEW</b>             | 500 tests  | 64NTBPEG    |
| ULK1 phospho-S758 kit                 | 500 tests  | 64ULKPEG    |
| VASP phospho-S157 kit                 | 500 tests* | 63ADK066PEG |
| VASP phospho-S239 kit                 | 500 tests* | 63ADK065PEG |
| VASP total kit                        | 500 tests  | 63ADK067PEG |
| VEGFR phospho-Y1175 kit               | 500 tests  | 63ADK041PEG |
| YAP phospho-S127 kit                  | 500 tests  | 64YAPPEG    |
| YAP total kit                         | 500 tests  | 64YATPEG    |
| ZAP-70 phospho-Y319 kit               | 500 tests  | 64ZAPPEG    |
| ZAP-70 total kit                      | 500 tests  | 64ZATPEG    |

Also available under 10 000 tests and \*96 tests  
Control lysate for each kit are available separately.

## Lysis buffer & blocking reagent

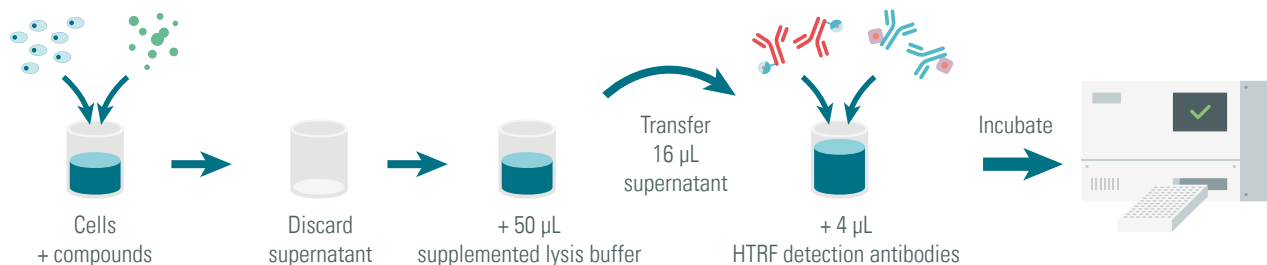
| Product                                    | Size   | Part #   |
|--|--------|----------|
| Phospho-total protein lysis buffer #1      | 130 mL | 64KL1FDF |
| Phospho-total protein lysis buffer #2      | 130 mL | 64KL2FDF |
| Phospho-total protein lysis buffer #3      | 130 mL | 64KL3FDF |
| Phospho-total protein lysis buffer #4      | 130 mL | 64KL4FDF |
| Phospho and Total protein blocking reagent | 2 mL   | 64KB1AAC |

## Intracellular proteins

| Product                      | Size      | Part #      |
|------------------------------|-----------|-------------|
| Human c-Myc cell-based kit   | 500 tests | 63ADK053PEG |
| Human Ki-67 kit <b>NEW</b>   | 500 tests | 64KI67PEG   |
| HIF-1 alpha kit              | 500 tests | 64HIFPEG    |
| PARP cleaved-Asp214 kit      | 500 tests | 64PARPEG    |
| Alpha-Tubulin acetyl-K40 kit | 500 tests | 63ADK072PEG |
| Alpha-Tubulin kit            | 500 tests | 63ADK073PEG |

Also available under 10 000 tests

Flow chart for the straightforward detection of phosphorylated proteins in adherent cells.



Bulk size available on request, contact us.



# GPCRs

## Applications

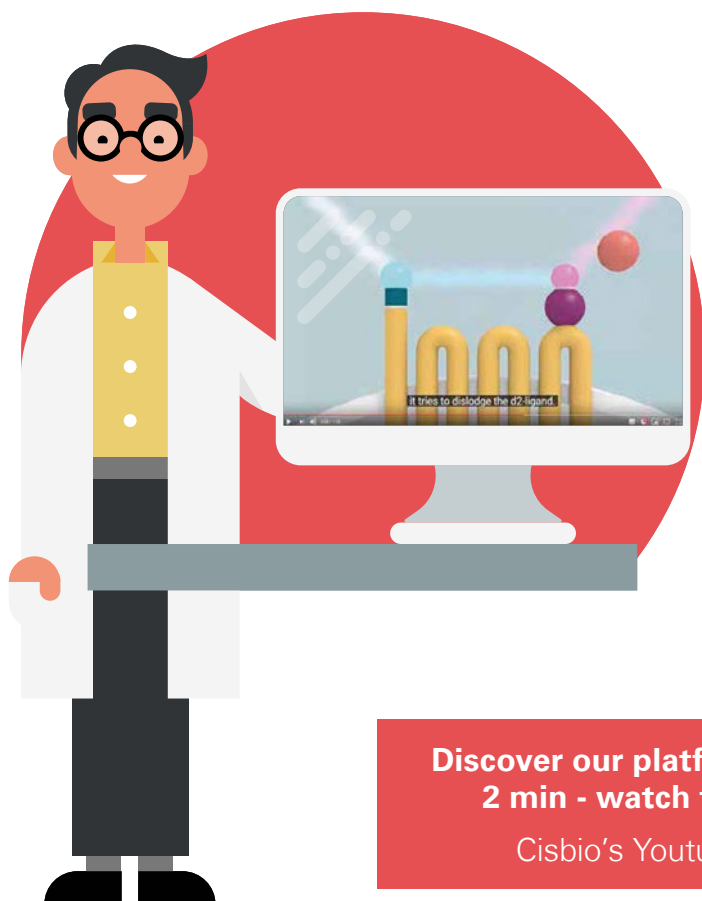
- Gs-, Gi/o-, Gq-coupled receptor activation
- Agonist, antagonist, inverse agonist, and allosteric modulator screening
- Detection of slow acting agonists and antagonists
- Phosphodiesterase (PDE) monitoring
- Adenylate cyclase activity assessment

## GPCR Platform

Gs, Gi, Gq protein 2<sup>nd</sup> messengers

Phosphorylation assays

Receptor binding assays



Cisbio is a leader in G protein-coupled receptor research and drug discovery, with over 100 products and compelling scientific content in all categories of GPCR binding and signaling.

Each year, hundreds of GPCR researchers around the globe trust our products to go further and faster in their research projects.

**Discover our platform in less than  
2 min - watch the video on:**

Cisbio's Youtube channel



## Gs, Gi, Gq protein and 2<sup>nd</sup> messengers

### cAMP Gs & cAMP Gi Assays

A choice of 3 kits to assess all Gs and Gi receptor configurations.

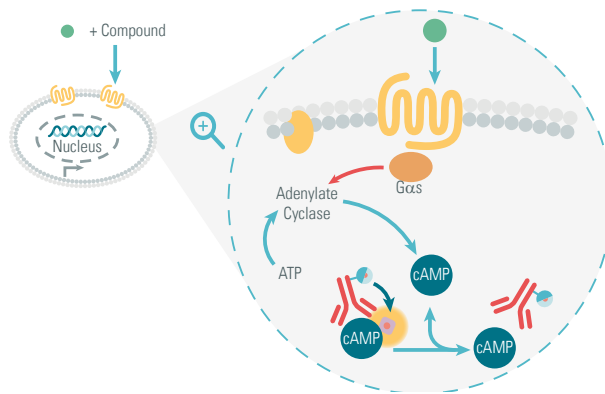
| Product               | Size        | Part #   |
|-----------------------|-------------|----------|
| cAMP - Gs Dynamic kit | 1 000 tests | 62AM4PEB |
| cAMP - Gs HiRange kit | 1 000 tests | 62AM6PEB |
| cAMP - Gi kit         | 1 000 tests | 62AM9PEB |

Also available under 20 000 tests

cAMP - Gs HiRange kit is suitable for membrane preparations.

| Product                                | Size         | Part #   |
|--|--------------|----------|
| IBMX - Phosphodiesterase inhibitor     | 40 $\mu$ L*  | 62AMXADA |
| Forskolin - Adenylyl cyclase activator | 40 $\mu$ L** | 62AMYADA |

Also available under \*500  $\mu$ L and \*\*800  $\mu$ L

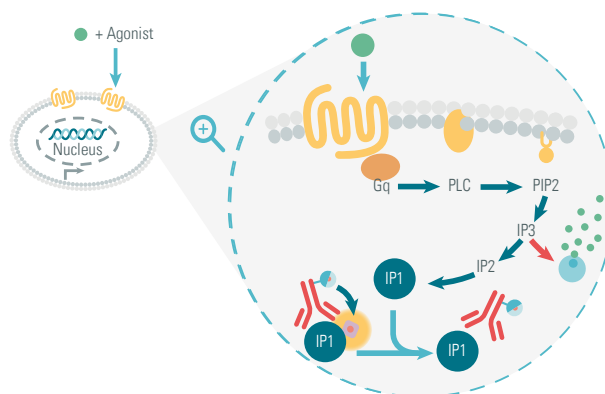


### IP-One - Gq Assay: Go for better compound pharmacology!

Cellular assays for quantifying IP1, a downstream metabolite of IP3 which is stable in the presence of LiCl. IP-One is the industry's preferred alternative to Calcium-Flux for primary screening and hit confirmation. IP-One assays are provided in HTRF® and ELISA formats.

| Product         | Size         | Part #   |
|-----------------|--------------|----------|
| IP-One - Gq kit | 1 000 tests* | 62IPAPEB |
| IP-One ELISA    | 96 tests**   | 72IP1PEA |

Also available under \*20 000 tests and \*\*5 x 96 tests



### Optimize your GPCR assays

Visit [www.cisbio.com/gpcr-universe](http://www.cisbio.com/gpcr-universe) and download your guides now



Bulk size available on request, contact us.

## Phosphorylation assays

### ERK1/2 assays

HTRF® assays for the detection of phosphorylated or total ERK1/2.

The phospho-kits measure the phosphorylation of specific residues (Thr202/Tyr204).

| Product                             | Size       | Part #   |
|-------------------------------------|------------|----------|
| Advanced ERK phospho-T202 /Y204 kit | 500 tests* | 64AERPEG |
| ERK phospho-T202/Y204 kit           | 500 tests  | 64ERKPEG |
| ERK total kit                       | 500 tests* | 64NRKPEG |

Also available under 10 000 tests and \*96 tests

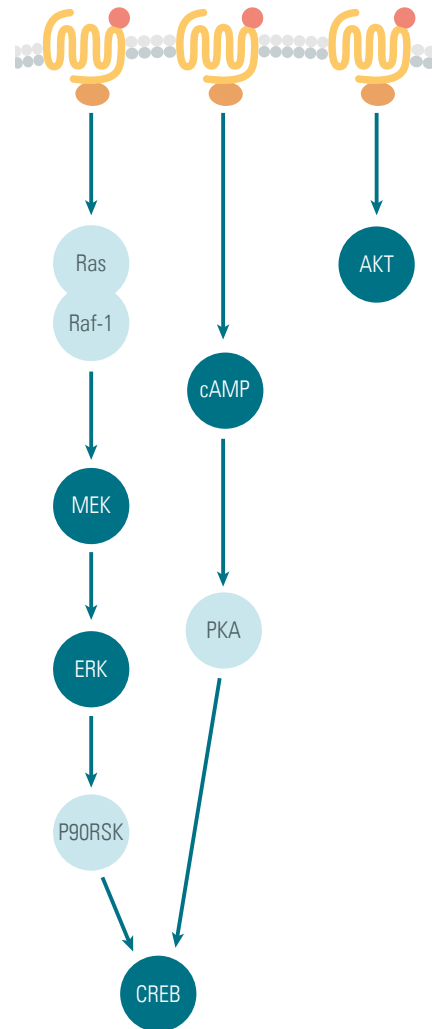
### AKT assays

HTRF® assays for the detection of phosphorylated or total AKT (protein kinase B).

Our phospho-kits measure the phosphorylation of specific residues (Ser473 or Thr308).

| Product               | Size       | Part #      |
|-----------------------|------------|-------------|
| AKT phospho-S473 kit  | 500 tests* | 64AKSPEG    |
| AKT phospho-T308 kit  | 500 tests  | 64AKTPEG    |
| AKT total kit         | 500 tests* | 64NKTPEG    |
| AKT1 phospho S473 kit | 500 tests  | 63ADK078PEG |
| AKT1 total kit        | 500 tests  | 63ADK079PEG |
| AKT2 phospho S473 kit | 500 tests  | 63ADK080PEG |
| AKT2 total kit        | 500 tests  | 63ADK081PEG |
| AKT3 phospho S473 kit | 500 tests  | 63ADK082PEG |
| AKT3 total kit        | 500 tests  | 63ADK083PEG |

Also available under 10 000 tests and \*96 tests



When GPCR activation triggers protein phosphorylation



### Optimize your phospho assays

Visit  
[www.cisbio.com/phospho-universe](http://www.cisbio.com/phospho-universe)  
 and download your guide now



Bulk size available on request, contact us.

## CREB assays

HTRF® assays for the detection of phosphorylated or total CREB.

The phospho-kit measures the phosphorylation of specific residues (Ser133).

| Product               | Size       | Part #      |
|-----------------------|------------|-------------|
| CREB phospho-S133 kit | 500 tests* | 64CREPEG    |
| CREB total kit        | 500 tests  | 63ADK052PEG |

Also available under 10 000 tests and \*96 tests

## STAT3 assays

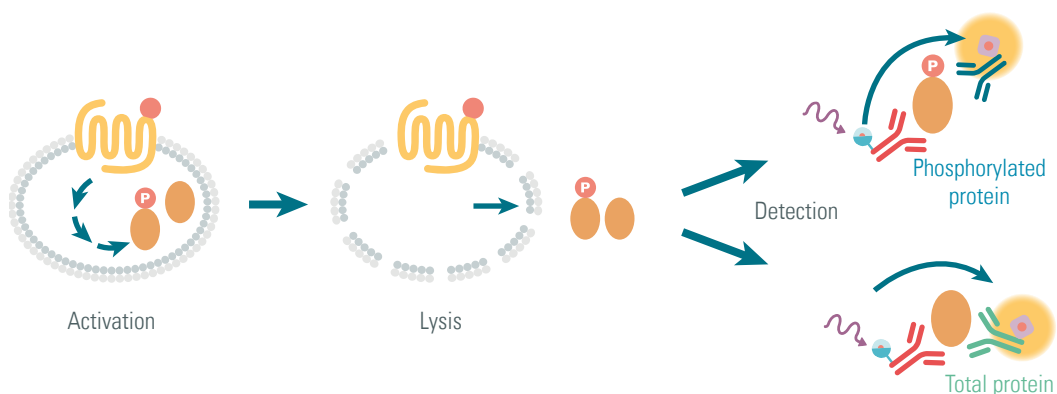
HTRF® assays for the detection of phosphorylated or total STAT3.

The phospho-kit measures the phosphorylation of specific residues (Tyr705).

| Product                | Size       | Part #   |
|------------------------|------------|----------|
| STAT3 phospho-Y705 kit | 500 tests* | 62AT3PEG |
| STAT3 total kit        | 500 tests  | 64NT3PEG |

Also available under 10 000 tests and \*96 tests

Run your phospho assay in less than 2 hours!



## Receptor binding assays - Tag-lite®

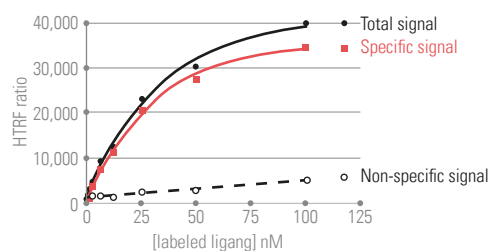
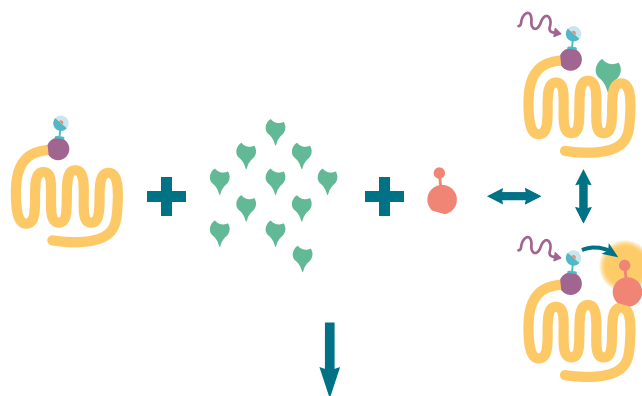
### Cell-based Tag-lite® assays

Tag-lite® is a cell-based, no-wash alternative to traditional radioisotope assays for studying GPCR-ligand interaction.

The receptor of interest is expressed as a SNAP-tag® fusion protein, which is labeled *in situ* with an HTRF® donor fluorophore, while the ligand is conjugated with the HTRF® acceptor fluorophore.

Tag-lite® offers you:

- Saturability and high affinity ⇒ determines  $K_d$  values
- Reversibility and specificity ⇒ correlates  $K_i$  with radioactive data
- Functionality ⇒ second messenger accumulation is unaffected by SNAP-tag®
- A DIY process to label your own receptor



| Family               | Receptor | Ligand Part # | Labeled cells Part # |
|----------------------|----------|---------------|----------------------|
| Adenosine <b>NEW</b> | A1       | L0067RED      | C1TT1A1              |
| Adenosine            | A2A      | L0058RED      | C1TT1A2A             |
| Adenosine <b>NEW</b> | A2B      | L0068RED      | C1TT1A2B             |
| Adenosine <b>NEW</b> | A3       | L0069GRE      | C1TT1A3              |
| Adrenoceptor         | Beta 1   | L0023GRE      | C1TT1BETA1           |
| Adrenoceptor         | Beta 2   | L0011GRE      | C1TT1BETA2           |
| Anaphylatoxin        | C5L2     | L0042RED      | C1TT1C5L2            |
| Angiotensin          | AT2      | L0007RED      | C1TT1AT2             |
| Bombesin             | BB1      | L0038RED      | C1TT1BB1             |
| Bombesin             | BB2      | L0019RED      | C1TT1BB2             |
| Bradykinin           | B1       | L0016RED      | C1TT1B1              |
| Bradykinin           | B2       | L0017RED      | C1TT1B2              |
| Chemokine            | CCR5     | L0024RED      | C1TT1CCR5            |
| Chemokine            | CXCR4    | L0012RED      | C1TT1CXCR4           |
| Cholecystokinin      | CCK1     | L0013RED      | C1TT1CCK1            |
| Cholecystokinin      | CCK2     | L0013RED      | C1TT1CCK2            |
| Class A Orphans      | GPR1     | L0037RED      | C1TT1GPR1            |
| Dopamine             | D1       | L0031GRE      | C1TT1D1              |
| Dopamine             | D2       | L0002RED      | C1TT1D2              |
| Dopamine             | D3a      | L0002RED      | C1TT1D3A             |
| Endothelin           | ETA      | L0022RED      | C1TT1ETA             |
| Endothelin           | ETB      | L0022RED      | C1TT1ETB             |
| Ghrelin              | GHSR1 A  | L0020RED      | C1TT1GHSR1A          |

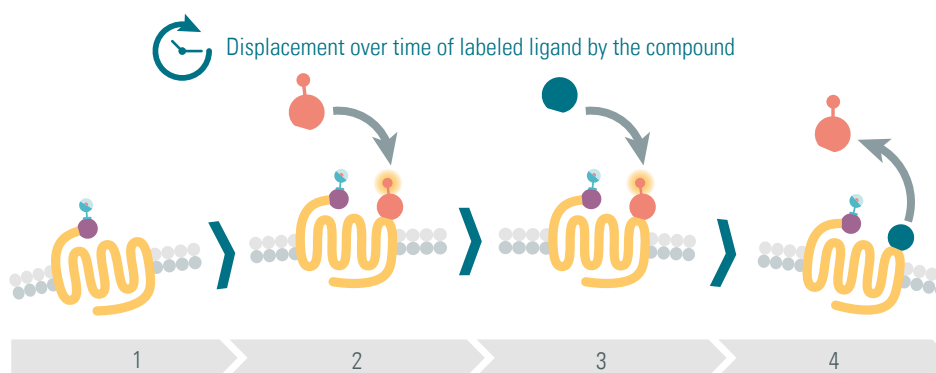
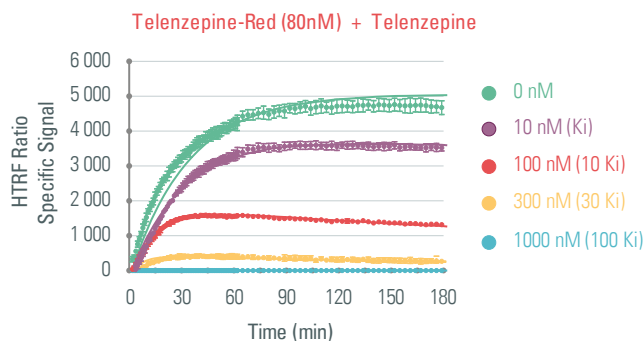
| Family               | Receptor     | Ligand Part # | Labeled cells Part # |
|----------------------|--------------|---------------|----------------------|
| Glucagon             | GIPR         | L0018RED      | C1TT1GIPR            |
| Glucagon             | GLP1         | L0030RED      | C1TT1GLP1            |
| Histamine            | H1           | L0015GRE      | C1TT1H1              |
| Histamine            | H3           | L0052RED      | C1TT1H3              |
| Melanocortin         | MC4          | L0006RED      | C1TT1MC4             |
| Melanocortin         | MC5          | L0006RED      | C1TT1MC5             |
| Muscarinic           | M1           | L0040RED      | C1TT1M1              |
| Muscarinic           | M2           | L0040RED      | C1TT1M2              |
| Muscarinic           | M4           | L0040RED      | C1TT1M4              |
| Muscarinic           | M5           | L0041RED      | C1TT1M5              |
| Opioid               | Delta opioid | L0005RED      | C1TT1DOP             |
| Opioid               | Kappa opioid | L0005RED      | C1TT1KOP             |
| Orexin               | OX1          | L0025RED      | C1TT1OX1             |
| Orexin               | OX2          | L0025RED      | C1TT1OX2             |
| Parathyroid          | PTH1R        | L0033RED      | C1TT1PTH1R           |
| Serotonin            | 5HT1A        | L0029RED      | C1TT15HT1A           |
| Serotonin            | 5HT1B        | L0045RED      | C1TT15HT1B           |
| Serotonin            | 5HT2C        | L0066GRE      | C1TT15HT2C           |
| Serotonin            | 5HT4         | L0043RED      | C1TT15HT4            |
| Somatostatin         | SST4         | L0064RED      | C1TT1SST4            |
| Tachykinin           | NK1          | L0008RED      | C1TT1NK1             |
| Vasopressin/Oxytocin | V2           | L0063RED      | C1TT1V2              |

Check out [www.cisbio.com/receptor-binding-universe](http://www.cisbio.com/receptor-binding-universe) for more information and for an up-to-date listing of available assays.

## Kinetic binding & Residence time

Tag-lite® is quickly becoming the industry standard for studying receptor-ligand binding interaction over time. Tag-lite® continues to demonstrate its effectiveness in the lab, taking the lead over traditional SPA and radioligand binding assays for studying kinetic parameters:

- No separation steps = detailed kinetic traces
- Cell-based solution
- No radioactive waste
- Small quantities of labeled ligands



## DIY: label your cell surface receptor!

Do you have an explorer mindset? These open access labeling reagents and plasmids include everything you need to set up exciting, colorful experiments using the Tag-lite® system.

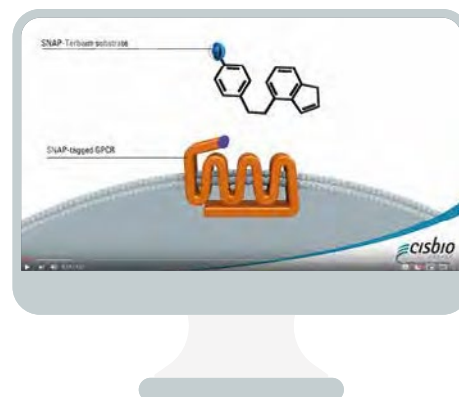
| Labeling medium              | Size   | Part # |
|------------------------------|--------|--------|
| Tag-lite® labeling medium 5X | 100 mL | LABMED |

| Substrates    | Size         | Part #   |
|---------------|--------------|----------|
| SNAP-Lumi4-Tb | 2 nmoles*    | SSNPTBD  |
| SNAP-Green    | 5 nmoles**   | SSNPGRNE |
| SNAP-Red      | 20 nmoles*** | SSNPREDE |

Also available under \*5 nmoles & 5 x 5 nmoles, \*\* 5 x 5 nmoles and \*\*\* 5 x 20 nmoles

| Plasmids                       | Size  | Part #     |
|--------------------------------|-------|------------|
| SNAP-Tag pT8-SNAP (Hygromycin) | 10 µg | PT8SNAPHYG |
| SNAP-Tag pT8-SNAP (Neomycin)   | 10 µg | PT8SNAPNEO |
| SNAP-Tag pT8-SNAP (Zeocin)     | 10 µg | PT8SNAPZEO |

More Tag-lite® plasmids and substrate available on [cisbio.com](http://cisbio.com)



In 2 min, see how to label your cell receptor:

[Cisbio's Youtube channel](#)



# Cytokine assays

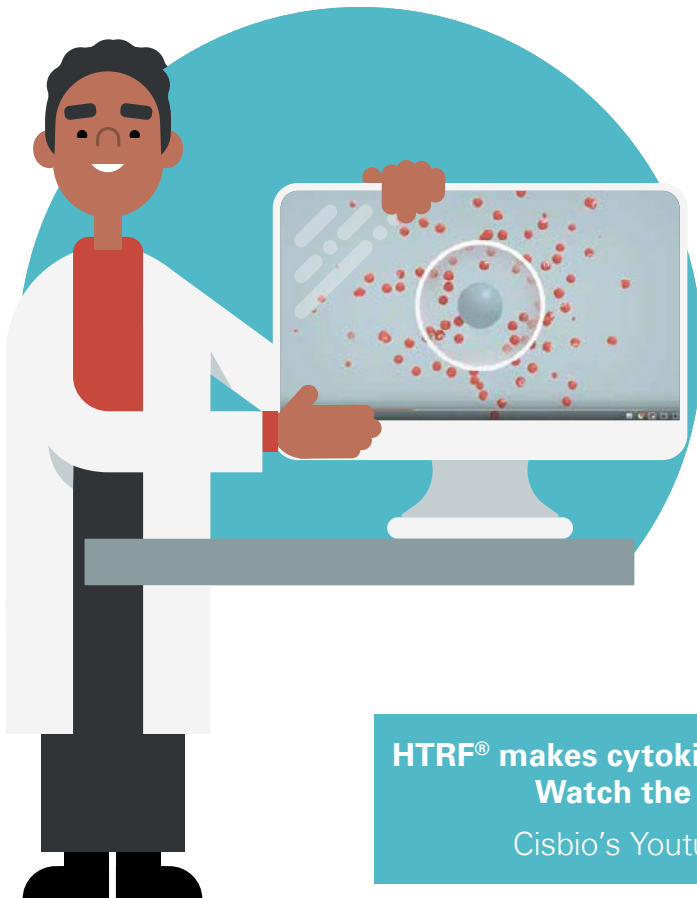
A full list of kits to measure cytokine release from cell lines or PBMCs.

## Applications

- Oncology / Immuno-oncology
- NASH / fibrosis
- Diabetes
- CNS
- Cardiovascular
- Inflammation/neuroinflammation
- Pain
- Rare diseases

## Features

- 16  $\mu$ L sample
- < 2 hrs bench time
- Validated on PBMC
- Compatible with Cisbio 96- & 384-well low-volume plates
- Allows multiple cytokine measurements from 1 sample



Cisbio's kits cover the full range of cytokines: interleukins, interferons (IFN), and chemokines.

All our assays enable the measurement of cytokine release in cell supernatant.

They have been validated in several cell lines, primary cells, and PBMCs.

The low sample requirement allows the quantification of multiple cytokines in parallel, from the same supernatant.

The HTRF<sup>®</sup> protocol makes the kits a fast alternative to ELISA or other measurement methods for researchers in oncology, NASH, immune tolerance, inflammatory diseases, or any other inflammation process.

Discover our 96-well format, including the Cisbio 96-well low-volume plate, for simple pathway investigation and easy pipetting (p41).

**HTRF<sup>®</sup> makes cytokine detection easy!**  
**Watch the video on:**

Cisbio's Youtube channel



## Cytokines: human, mouse, rat, cynomolgus

| Product                         | Size       | Part #      |
|---------------------------------|------------|-------------|
| Human CCL2 (MCP1) kit           | 500 tests  | 62HCCL2PEG  |
| Mouse CCL2 (MCP1) kit           | 500 tests  | 62MCCL2PEG  |
| Human CCL3 (MIP1a) kit          | 500 tests  | 62HCCL3PEG  |
| Human CCL4 kit                  | 500 tests  | 62HCCL4PEG  |
| Human CCL5 (RANTES) kit         | 500 tests  | 62HCCL5PEG  |
| Human CCL20 kit                 | 500 tests  | 62HCC20PEG  |
| Human CXCL1 (GRO $\alpha$ ) kit | 500 tests  | 62HCXC1PEG  |
| Human CXCL10 (IP10) kit         | 500 tests  | 62HCX10PEG  |
| Human G-CSF kit                 | 500 tests  | 62HGCSFPEG  |
| Human GM-CSF kit                | 500 tests  | 62HGMCSFPEG |
| Human IFN alpha kit             | 500 tests  | 62HIFNAPEG  |
| Human IFN beta kit <b>NEW</b>   | 500 tests  | 62HIFNBPEG  |
| Human IFN gamma kit             | 500 tests* | 62HIFNGPEG  |
| Mouse IFN gamma kit             | 500 tests  | 62MIFNGPEG  |
| Human IL1 alpha kit             | 500 tests  | 62HIL1APEG  |
| Mouse IL1 alpha kit             | 500 tests  | 62MIL1APEG  |
| Human IL1 beta kit              | 500 tests  | 62HIL1BPEG  |
| Mouse IL1 beta kit              | 500 tests  | 62MIL1BPEG  |
| Human IL2 kit                   | 500 tests* | 62HIL02PEG  |
| Mouse IL2 kit                   | 500 tests  | 62MIL02PEG  |
| Human IL4 kit                   | 500 tests  | 62HIL04PEG  |
| Human IL5 kit                   | 500 tests  | 62HIL05PEG  |
| Human IL6 kit                   | 500 tests  | 62HIL06PEG  |
| Mouse IL6 kit                   | 500 tests* | 62MIL06PEG  |
| Human IL8 kit                   | 500 tests* | 62HIL08PEG  |
| Human IL10 kit                  | 500 tests  | 62HIL10PEG  |
| Human IL12 kit                  | 500 tests  | 62HIL12PEG  |
| Human IL13 kit <b>NEW</b>       | 500 tests  | 62HIL13PEG  |
| Human IL17 kit                  | 500 tests* | 62HIL17PEG  |
| Mouse IL17 kit                  | 500 tests  | 62MIL17PEG  |
| Human IL18 kit                  | 500 tests  | 62HIL18PEG  |
| Human IL22 kit <b>NEW</b>       | 500 tests  | 62HIL22PEG  |
| Human IL23 kit                  | 500 tests  | 62HIL23PEG  |
| Human IL31 kit                  | 500 tests  | 62HIL31PEG  |
| TGF beta 1 kit                  | 500 tests  | 62HTGFBPEG  |
| Human TNF alpha kit             | 500 tests* | 62HTNFAPEG  |
| Mouse TNF alpha kit             | 500 tests  | 62MTNFAPEG  |
| Cynomolgus TNF alpha kit        | 500 tests  | 62CTNFAPEG  |

Also available under 10 000 tests and \*96 tests

| Product                              | Size   | Part #      |
|--------------------------------------|--------|-------------|
| Human CCL2 (MCP1) standard           | 1 vial | 62HCCL2CDA  |
| Mouse CCL2 (MCP1) standard           | 1 vial | 62MCCL2CDA  |
| Human CCL3 (MIP1a) standard          | 1 vial | 62HCCL3CDA  |
| Human CCL4 standard                  | 1 vial | 62HCCL4CDA  |
| Human CCL5 (RANTES) standard         | 1 vial | 62HCCL5CDA  |
| Human CCL20 standard                 | 1 vial | 62HCC20CDA  |
| Human CXCL1 (GRO $\alpha$ ) standard | 1 vial | 62HCXC1CDA  |
| Human CXCL10 (IP10) standard         | 1 vial | 62HCX10CDA  |
| Human G-CSF standard                 | 1 vial | 62HGCSFCDA  |
| Human GM-CSF standard                | 1 vial | 62HGMCSFCDA |
| Human IFN alpha standard             | 1 vial | 62HIFNACDA  |
| Human IFN beta standard <b>NEW</b>   | 1 vial | 62HIFNBCDA  |
| Human IFN gamma standard             | 1 vial | 62HIFNGCDA  |
| Mouse IFN gamma standard             | 1 vial | 62MIFNGCDA  |
| Human IL1 alpha standard             | 1 vial | 62HIL1ACDA  |
| Mouse IL1 alpha standard             | 1 vial | 62MIL1ACDA  |
| Human IL1 beta standard              | 1 vial | 62HIL1BCDA  |
| Mouse IL1 beta standard              | 1 vial | 62MIL1BCDA  |
| Human IL2 standard                   | 1 vial | 62HIL02CDA  |
| Mouse IL2 standard                   | 1 vial | 62MIL02CDA  |
| Human IL4 standard                   | 1 vial | 62HIL04CDA  |
| Human IL5 standard                   | 1 vial | 62HIL05CDA  |
| Human IL6 standard                   | 1 vial | 62HIL06CDA  |
| Mouse IL6 standard                   | 1 vial | 62MIL06CDA  |
| Human IL8 standard                   | 1 vial | 62HIL08CDA  |
| Human IL10 standard                  | 1 vial | 62HIL10CDA  |
| Human IL12 standard                  | 1 vial | 62HIL12CDA  |
| Human IL13 standard <b>NEW</b>       | 1 vial | 62HIL13CDA  |
| Human IL17 standard                  | 1 vial | 62HIL17CDA  |
| Mouse IL17 standard                  | 1 vial | 62MIL17CDA  |
| Human IL18 standard                  | 1 vial | 62HIL18CDA  |
| Human IL22 standard <b>NEW</b>       | 1 vial | 62HIL22CDA  |
| Human IL23 standard                  | 1 vial | 62HIL23CDA  |
| Human IL31 standard                  | 1 vial | 62HIL31CDA  |
| TGF beta 1 standard                  | 1 vial | 62HTGFBBCDA |
| Human TNF alpha standard             | 1 vial | 62HTNFBACDA |
| Mouse TNF alpha standard             | 1 vial | 62MTNFBACDA |
| Cynomolgus TNF alpha standard        | 1 vial | 62CTNFBACDA |

Also available under 3 vials

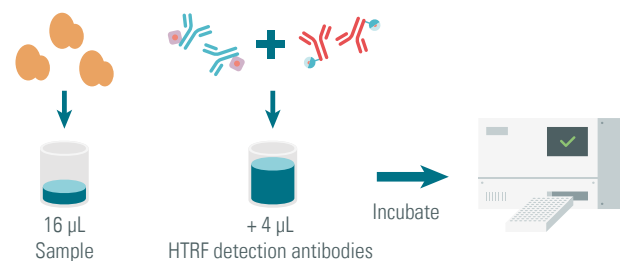
## Related assays

| Product              | Size      | Part #      |
|----------------------|-----------|-------------|
| Human Granzyme B kit | 500 tests | 63ADK095PEH |
| Human Perforin-1 kit | 500 tests | 63ADK100PEG |

Also available under 10 000 tests

Bulk size available on request, contact us.

Check out [www.cisbio.com/cytokines](http://www.cisbio.com/cytokines) for an up-to-date list of available assays.





# Immunity & cancer assays

## Applications

- Oncology
- Immuno-oncology
- Immune tolerance

## Features

- Biochemical and cellular formats
- All components included in kit
- Validated with reference Ab / compounds
- Screen for interaction inhibitors



Discover our Immuno-oncology environment

[www.cisbio.com/immuno-onco-universe](http://www.cisbio.com/immuno-onco-universe)

Expressed by immune cells and their matching cellular partners, these proteins can be inhibitory or stimulatory.

## Immune checkpoint assays

| Product                       | Size      | Part #     |
|-------------------------------|-----------|------------|
| CD47 / SIRP alpha binding kit | 500 tests | 64ICP02PEG |
| CTLA4/B7-1 binding assay kit  | 500 tests | 64ICP04PEG |
| CTLA4/B7-2 binding assay kit  | 500 tests | 64ICP05PEG |
| LAG3/MHC II binding assay kit | 500 tests | 64ICP03PEG |
| PD1/PD-L1 binding assay kit   | 500 tests | 64ICP01PEG |

Also available under 10 000 tests

## STING assays

| Product                            | Size      | Part #    |
|------------------------------------|-----------|-----------|
| Human STING binding kit <b>NEW</b> | 500 tests | 64BDSTPEG |
| STING phospho-S366 kit <b>NEW</b>  | 500 tests | 64STGPEG  |
| STING total kit <b>NEW</b>         | 500 tests | 64NTGPEG  |

Also available under 10 000 tests

## Adenosine receptor assays

| Family               | Receptor | Ligand Part # | Labeled cells Part # |
|----------------------|----------|---------------|----------------------|
| Adenosine <b>NEW</b> | A1       | L0067RED      | C1TT1A1              |
| Adenosine            | A2A      | L0058RED      | C1TT1A2A             |
| Adenosine <b>NEW</b> | A2B      | L0068RED      | C1TT1A2B             |
| Adenosine <b>NEW</b> | A3       | L0068GRE      | C1TT1A3              |

# Biomarkers

for main disease areas

## Applications

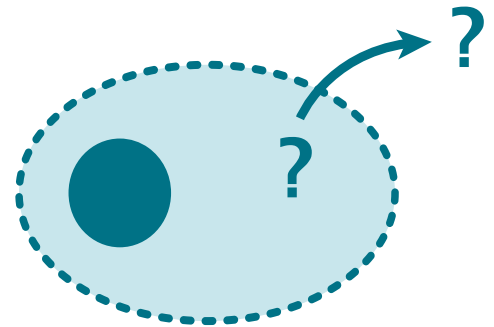
- CNS
- Diabetes
- NASH
- Rare diseases
- Inflammation
- Cardiovascular
- Oncology
- Pain

## Features

- Simple add-and-read method, alternative to ELISA
- < 1 hr bench time
- Compatible with Cisbio 96-well low-volume plate
- All components included in kit



An easy way to measure markers either inside or secreted by your cells.



Cisbio's kits are developed to measure released and circulating biomarkers. This offering covers multiple research areas, such as CNS, cardiovascular, inflammation, oncology, pain, metabolism, NASH, and diabetes. The add-and-read HTRF® protocol makes them a fast and accurate alternative to ELISA and other conventional methods. The assays measure biomarkers in supernatants or cell lysates.

## Allergy

| Product                 | Size      | Part #    |
|-------------------------|-----------|-----------|
| Histamine - Dynamic kit | 500 tests | 62HTMDPEG |

Also available under 96 testss

## Arachidonic pathway - inflammation

| Product              | Size      | Part #   |
|----------------------|-----------|----------|
| LTB4 kit             | 500 tests | 64LB4PEG |
| LTC4 kit             | 500 tests | 64LC4PEG |
| Prostaglandin E2 kit | 500 tests | 62P2APEG |

Also available under 10 000 tests

## Cardiovascular

| Product                     | Size       | Part #      |
|-----------------------------|------------|-------------|
| cGMP kit                    | 500 tests* | 62GM2PEG    |
| Human Apolipoprotein A1 kit | 500 tests  | 64APAPEG    |
| Human Apolipoprotein B kit  | 500 tests  | 64APBPEG    |
| Human Apolipoprotein C3 kit | 500 tests  | 63ADK001PEG |
| Human Apolipoprotein E kit  | 500 tests  | 63ADK004PEG |
| Human PCSK-9 kit            | 500 tests  | 63ADK050PEG |

Also available under 10 000 tests

## CNS

| Product                          | Size        | Part #      |
|----------------------------------|-------------|-------------|
| APP substrate                    | 5 000 tests | 64APPKAA    |
| Biotin-APP substrate-Eu cryptate | 5 000 tests | 64APBKAA    |
| Human Amyloid beta 1-40 kit      | 500 tests   | 62B40PEG    |
| GAD67 kit                        | 500 tests   | 63ADK002PEG |
| Human MANF kit                   | 500 tests   | 63ADK056PEG |
| Human Progranulin kit            | 500 tests   | 63ADK084PEH |
| A-Synuclein aggregation kit      | 500 tests   | 6FASYPEG    |
| Alpha-synuclein total kit        | 500 tests   | 6FNSYPEG    |
| MAP-Tau kit                      | 500 tests   | 63ADK008PEG |
| Tau aggregation kit              | 500 tests   | 6FTAUPEG    |
| Human TREM-2 kit                 | 500 tests   | 63ADK099PEG |

Also available under 10 000 tests

## Diabetes

| Product                     | Size       | Part #      |
|-----------------------------|------------|-------------|
| Glucagon Serum kit          | 200 tests* | 62SGLPEF    |
| Glucagon kit                | 500 tests  | 62CGLPEG    |
| Active GLP1 kit             | 500 tests  | 62GLPPEG    |
| Insulin Mouse Serum kit     | 200 tests* | 62IN3PEF    |
| Insulin Ultra Sensitive kit | 500 tests  | 62IN2PEG    |
| Insulin High Range kit      | 500 tests  | 62IN1PEG    |
| Rat IGF1 kit                | 500 tests  | 63ADK032PEG |
| Human PCSK-9 kit            | 500 tests  | 63ADK050PEG |

Also available under 10 000 tests and \* 5 x 200 tests

## Hormones

| Product              | Size      | Part #   |
|----------------------|-----------|----------|
| Aldosterone kit      | 500 tests | 64ALDPEG |
| Cortisol kit         | 500 tests | 62CRTPEG |
| Estradiol kit        | 500 tests | 62ESTPEG |
| Progesterone kit     | 500 tests | 6FPROPEG |
| Prostaglandin E2 kit | 500 tests | 62P2APEG |
| Testosterone kit     | 500 tests | 64TESPEG |

Also available under 10 000 tests

## Immunity

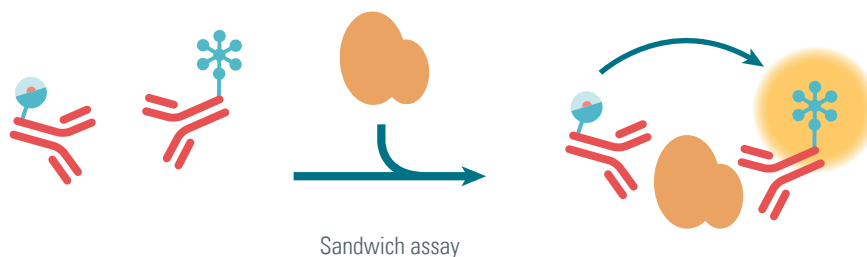
| Product                            | Size      | Part #      |
|------------------------------------|-----------|-------------|
| Human Granzyme B kit               | 500 tests | 63ADK095PEH |
| Human Perforin-1 kit               | 500 tests | 63ADK100PEG |
| Human STING binding kit <b>NEW</b> | 500 tests | 64BDSTPEG   |

Also available under 10 000 tests

## Inflammation

| Product                  | Size      | Part #      |
|--------------------------|-----------|-------------|
| Human Heme Oxygenase kit | 500 tests | 63ADK044PEG |

Also available under 10 000 tests



## Intracellular proteins

| Product                      | Size       | Part #      |
|------------------------------|------------|-------------|
| Human c-Myc cell-based kit   | 500 tests  | 63ADK053PEG |
| Human Ki-67 kit <b>NEW</b>   | 500 tests* | 64KI67PEG   |
| HIF-1 alpha kit              | 500 tests  | 64HIFPEG    |
| PARP cleaved-Asp214 kit      | 500 tests  | 64PARPEG    |
| Alpha-Tubulin acetyl-K40 kit | 500 tests  | 63ADK072PEG |
| Alpha-Tubulin kit            | 500 tests  | 63ADK073PEG |

Also available under 10 000 tests

## NASH

| Product                                  | Size       | Part #      |
|--|------------|-------------|
| Alpha-SMA kit                            | 500 tests* | 62ASMAPEG   |
| Hyaluronic acid kit                      | 500 tests* | 63ADK089PEG |
| Hyaluronic Acid ELISA kit                | 96 tests   | HYAL-US     |
| Human MMP2 kit <b>NEW</b>                | 500 tests* | 66MMP2PEG   |
| Human MMP9 kit <b>NEW</b>                | 500 tests* | 66MMP9PEG   |
| Human TIMP1 kit <b>NEW</b>               | 500 tests* | 64TIMPEG    |
| Procollagen-III-peptide (P3NP) ELISA Kit | 96 tests   | P3NP-EL-US  |
| Pro-collagen Type 1 (human) kit          | 500 tests* | 63ADK014PEG |

Also available under 10 000 tests

## Phosphodiesterases

| Product               | Size        | Part #   |
|-----------------------|-------------|----------|
| cAMP - Gs HiRange kit | 1 000 tests | 62AM6PEB |

Also available under 20 000 tests

## Rare diseases

| Product                        | Size      | Part #      |
|--------------------------------|-----------|-------------|
| Human FMRP kit - 500 tests     | 500 tests | 63ADK038PEG |
| Human Frataxin kit - 500 tests | 500 tests | 63ADK039PEG |
| Human MBNL1 kit                | 500 tests | 63ADK012PEG |
| Myosin Heavy Chain kit         | 500 tests | 63ADK098PEG |
| Human SMN kit                  | 500 tests | 63ADK033PEG |
| Human Utrophin kit             | 500 tests | 63ADK035PEG |
| Mouse Utrophin kit             | 500 tests | 63ADK070PEG |

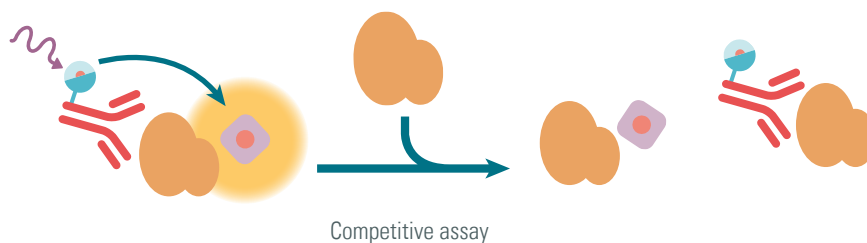
Also available under 10 000 tests

## Virology

| Product  | Size      | Part #   |
|--|-----------|----------|
| HSA kit  | 500 tests | 6FHSAPEG |
| <b>NEW</b> Viral double-stranded RNA detection | 500 tests | 64RNAPEG |

Also available under 10 000 tests

Check out [www.cisbio.com/biomarkers](http://www.cisbio.com/biomarkers) for an up-to-date list of available assays.



# Tools for PPIs & assay development

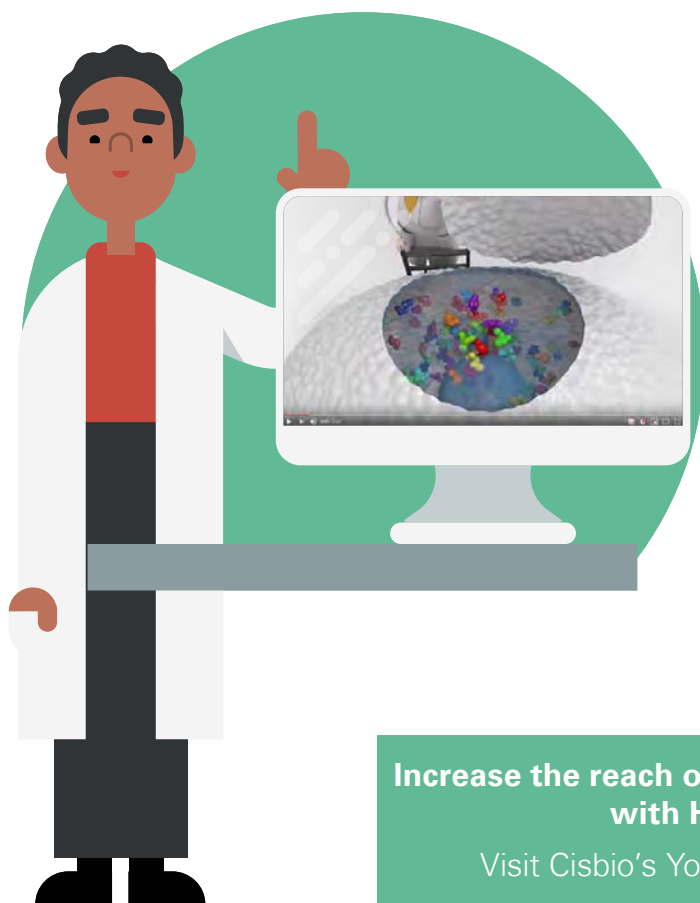
A simple way to run your PPI experiments!

## Applications

- Biotherapeutics screening
- Protein-protein interactions
  - Small to large complexes
  - Low to high affinity
- Nuclear receptor assays
- Protease and other enzyme assays
- Protein-DNA interaction

## Product platform

- Anti-tag
- Anti-immunoglobulin
- Affinity systems
- Do-it-yourself labeling



HTRF<sup>®</sup> enables an unlimited number of biochemical and cellular applications. Whether you are looking to design novel assays or want to convert a current assay to a simpler, more cost-effective HTRF<sup>®</sup> format, Cisbio's tools for assay development are the ideal solution.

Cisbio offers an extensive line of ready-to-use protein-protein interaction reagents labeled with HTRF<sup>®</sup> fluorescent dyes (europium- and terbium-cryptates, XL665, and d2) for the development of novel or customer-specific assays.

A wide range of assays have already been produced with these reagents and have proven relevant when addressing interactions of widely varying sizes, affinities, and formats.

**Increase the reach of your PPI research  
with HTRF**

Visit Cisbio's YouTube channel



**Target molecules:** GST, 6HIS, cmyc, FLAG, HA, DNP, MBP, Biotin, Mouse IgG, Rabbit IgG, Human IgG

## Anti-tag

### Anti-tag antibodies

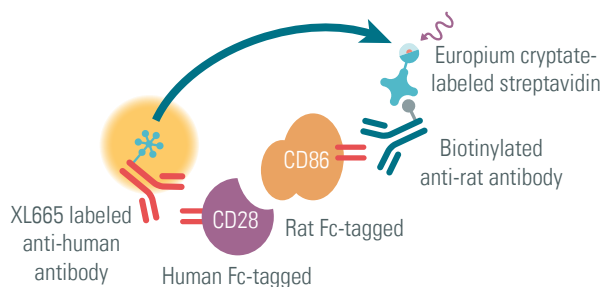
Monoclonal antibodies against the most frequently used proteinic, peptidic, and small organic motifs labeled with HTRF® acceptor and donor fluorophores. Most antibodies are available labeled with Europium-cryptate, Terbium-cryptate, XL665, or d2 for maximum assay design flexibility.



| Product                        | Size         | Part #   |
|--------------------------------|--------------|----------|
| MAb Anti 6HIS-d2               | 1 000 tests* | 61HISDLF |
| MAb Anti 6HIS-Eu cryptate      | 5 000 tests  | 61HISKLA |
| MAb Anti 6HIS-Eu cryptate Gold | 5 000 tests  | 61HI2KLA |
| MAb Anti 6HIS-Tb cryptate      | 1 000 tests* | 61HISTLF |
| MAb Anti 6HIS-Tb cryptate Gold | 1 000 tests* | 61HI2TLF |
| MAb Anti 6HIS-XL665            | 1 000 tests* | 61HISXLF |
| MAb Anti cmyc-d2               | 1 000 tests* | 61MYCDAF |
| MAb Anti cmyc-Eu cryptate      | 5 000 tests  | 61MYCKLA |
| MAb Anti cmyc-Tb cryptate      | 1 000 tests* | 61MYCTAF |
| MAb Anti cmyc-XL665            | 1 000 tests* | 61MYCXLF |
| MAb Anti DNP-Eu cryptate       | 5 000 tests  | 61DNPKLA |
| MAb Anti DNP-XL665             | 5 000 tests  | 61DNPXLA |
| MAb Anti FLAG M2-d2            | 1 000 tests* | 61FG2DLF |
| MAb Anti FLAG M2-Eu cryptate   | 5 000 tests  | 61FG2KLA |
| MAb Anti FLAG M2-Tb cryptate   | 1 000 tests* | 61FG2TLF |
| MAb Anti FLAG M2-XL665         | 1 000 tests* | 61FG2XLF |
| MAb Anti GST-d2                | 1 000 tests* | 61GSTDLF |
| MAb Anti GST-Eu cryptate       | 5 000 tests  | 61GSTKLA |
| MAb Anti GST-Tb cryptate       | 1 000 tests* | 61GSTTLF |
| MAb Anti GST-XL665             | 1 000 tests* | 61GSTXLF |

| Product                  | Size         | Part #   |
|--------------------------|--------------|----------|
| MAb Anti HA-d2           | 1 000 tests* | 610HADAF |
| MAb Anti HA-Eu cryptate  | 5 000 tests  | 610HAKLA |
| MAb Anti HA-Tb cryptate  | 1 000 tests* | 610HATAF |
| MAb Anti HA-XL665        | 1 000 tests* | 610HAXLF |
| MAb Anti MBP-d2          | 5 000 tests  | 61MBPDAA |
| MAb Anti MBP-Eu cryptate | 5 000 tests  | 61MBPKAA |
| MAb Anti MBP-Tb cryptate | 5 000 tests  | 61MBPTAA |

Also available under 20 000 tests and \* 5 000 & 20 000 tests

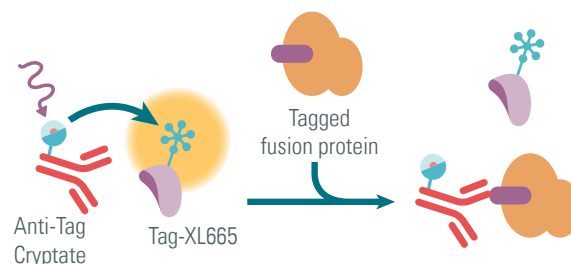


### Tag Check Kits

Ready-to-use kits for the rapid detection of protein tags. These HTRF® assays are useful for tagged-protein quantification, monitoring tag accessibility, and eliminating HTS false positives due to compound-tag interference.

| Product             | Size       | Part #      |
|---------------------|------------|-------------|
| 6HIS check kit Gold | 500 tests* | 62HISPEG    |
| FLAG check kit      | 500 tests* | 63ADK036PEG |
| GST check kit       | 500 tests  | 62GSTPEG    |

Also available under \*10 000 tests



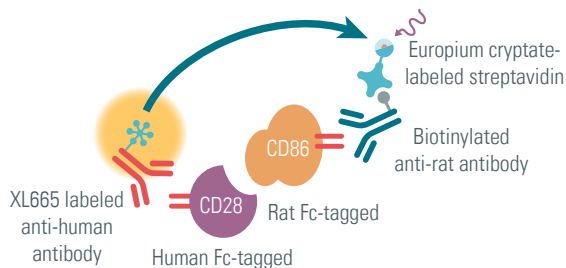
## Anti-immunoglobulin

### Anti-species reagents

Secondary antibodies and protein A labeled with HTRF® donor and acceptor fluorophores. Ideal for use in developing assays for which directly labeled components are not available.

| Product                          | Size         | Part #   |
|----------------------------------|--------------|----------|
| PAb Anti Human IgG-Eu cryptate   | 5 000 tests  | 61HFCKLA |
| PAb Anti Human IgG-Tb cryptate   | 1 000 tests* | 61HFCTAF |
| PAb Anti Human IgG-d2            | 1 000 tests* | 61HFCDAF |
| PAb Anti Human IgG-XL665         | 1 000 tests* | 61HFCXLF |
| MAb Anti Human Kappa-Eu cryptate | 5 000 tests  | 61KAPKAA |
| MAb Anti Human Kappa-d2          | 5 000 tests  | 61KAPDAA |
| PAb Anti Mouse IgG-Eu cryptate   | 5 000 tests  | 61PAMKLA |
| PAb Anti Mouse IgG-Tb cryptate   | 1 000 tests* | 61PAMTAF |
| PAb Anti Mouse d2                | 1 000 tests* | 61PAMDAP |
| PAb Anti Mouse IgG-XL665         | 1 000 tests* | 61PAMXLF |
| PAb Anti Rabbit IgG-Eu cryptate  | 5 000 tests  | 61PARKLA |
| PAb Anti Rabbit IgG-Tb cryptate  | 1 000 tests* | 61PARTAF |
| PAb Anti Rabbit IgG-d2           | 1 000 tests* | 61PARDAF |
| PAb Anti Rabbit IgG-XL665        | 1 000 tests* | 61PARXLF |
| Protein A-Eu cryptate            | 5 000 tests  | 61PRAKLA |
| Protein A-XL665                  | 5 000 tests  | 61PRAXLA |

Also available under 20 000 tests and \* 5 000 & 20 000 tests



## Affinity systems

### Streptavidin

High grade streptavidin conjugated to a variety of HTRF® donor and acceptor fluorophores for the development of assays that include biotinylated components.

| Product                  | Size         | Part #   |
|--------------------------|--------------|----------|
| Streptavidin-Eu cryptate | 5 000 tests  | 610SAKLA |
| Streptavidin-Tb cryptate | 1 000 tests* | 610SATLF |
| Streptavidin-d2          | 1 000 tests* | 610SADLF |
| Streptavidin-XL665       | 1 000 tests* | 610SAXLF |
| Streptavidin-XLent!      | 5 000 tests  | 611SAXLA |

Also available under 20 000 tests and \* 5 000 & 20 000 tests

### Buffers

Ready-to-use PPI detection buffers are designed for a rapid assay set-up and to generate reproducible assay results.

| Product                         | Size   | Part #    |
|---------------------------------|--------|-----------|
| PPI - Europium detection buffer | 200 mL | 61DB9RDF  |
| PPI - Terbium detection buffer  | 200 mL | 61DB10RDF |

Bulk size available on request, contact us.



Get your guide for setting up  
protein-protein interaction assays

Visit

[www.cisbio.com/interactome-universe](http://www.cisbio.com/interactome-universe)



## Enzymatic assays

### Substrates and regulatory proteins for enzymatic assays

The substrates are designed to monitor protease cleavage of peptidic substrates. A typical format uses a substrate that is biotinylated on one end and directly labeled with Europium cryptate on the other. The detection step is made in presence of SA-XL665. The enzymatic activity is inversely proportional to the intensity of the FRET signal. For enzymes with high  $K_m$  constants, the addition of unlabeled substrate may be required to run the enzymatic reaction efficiently.

Similarly, Eu-cryptate ubiquitin can be used as a conjugated protein to study the different enzymatic steps of the protein ubiquitination cascade: activation (E1), conjugation (E2), and ligation (E3). The ubiquitin donor conjugate is most commonly used with biotinylated or tagged target proteins which can then be detected by SA-XL665 or anti-tag acceptor conjugates.

| Product                            | Size        | Part #   |
|------------------------------------|-------------|----------|
| APP substrate                      | 5 000 tests | 64APPKAA |
| Biotin-APP substrate-Eu cryptate   | 5 000 tests | 64APBKAA |
| Biotin-Heparan sulfate-Eu cryptate | 5 000 tests | 61BHSKAA |
| Ubiquitin-Eu cryptate              | 5 000 tests | 61UBIKLA |

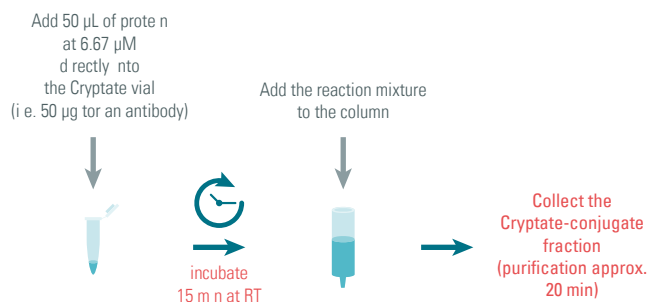
Also available under 20 000 tests

## Do-it-yourself labeling

### Dye labeling kits

Cryptate and d2 dye labeling kits for quick, easy labeling of biomolecules with HTRF<sup>®</sup> dyes. Each kit contains an N-hydroxysuccinimide activated HTRF<sup>®</sup> dye (Eu<sup>3+</sup>-TBP-NHS cryptate, Lumi4<sup>®</sup>-Tb-NHS cryptate, and d2 dye) that reacts with primary amines for simplified conjugation. Kits include all the materials necessary for the labeling procedure (except dialysis and concentration devices).

| Product           | Size         | Part #   |
|-------------------|--------------|----------|
| d2 Labeling kit   | Labeling kit | 62D2DPEA |
| Europium Cryptate | Labeling kit | 62EUSPEA |
| Terbium Cryptate  | Labeling kit | 62TBSPEA |

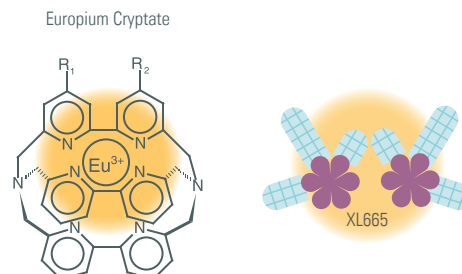


### Labeling reagents

Reagents designed for labeling biomolecules with Europium-cryptate, XL665, or DNP. Cryptate and XL665 dyes come with several different functional groups for flexibility in label conjugation. These reagents are recommended for experienced users familiar with labeling, protein chemistry, and chromatography.

| Product                         | Size    | Part #   |
|---------------------------------|---------|----------|
| Europium cryptate NH2           | 0,1 mg* | 65EU2ABA |
| Europium cryptate TBP Maleimide | 0,1 mg* | 65EUMABA |
| Europium cryptate TBP NHS       | 0,1 mg* | 65EUSABA |
| XL665 Maleimide                 | 1 mg**  | 65XLMABB |
| XL665 NH2                       | 1 mg**  | 65XL2ABB |
| DNP-NHS                         | 0,2 mg* | 65DNSABD |

Also available under \* 1 mg and \*\*10 mg





# Kinase

## biochemical assays

### Applications

- Serine/Threonine and Tyrosine kinase screening
- Kinase profiling and selectivity
- Kinase/inhibitor binding monitoring
- Pharmacodynamic studies
- ATPases
- Phosphatases
- Mechanism-of-action studies

### Features

- Validated on over 200 kinases
- Low enzyme consumption
- Broad range of ATP (up to mM)
- Study of inactive or mutated kinases



Cisbio offers an extensive HTRF<sup>®</sup>-based line of biochemical and kinase assays and reagents for analyzing serine/threonine, tyrosine kinases. This platform is available in semi-universal and kinase-specific assay formats.

All HTRF<sup>®</sup> biochemical kinase assays use nonradioactive, homogeneous protocols, and are compatible with a range of ATP concentrations and substrate types, including whole proteins.

Cisbio recently developed a line of kinase binding assays to specifically monitor kinase/inhibitor interactions and complement its existing kinase activity assay solutions.

The assays can be easily miniaturized for increased throughput, reduced reagent usage, and lower enzyme consumption. Additionally, HTRF<sup>®</sup> enables the multiple cell-based assay readings essential for conducting kinetic studies. Cisbio also offers cellular kinase assays. For more information please refer to the Cellular Phosphorylation section in this catalog.

**Find out everything about HTRF<sup>®</sup> kinase solutions**

Visit [www.cisbio.com/kinases](http://www.cisbio.com/kinases)



## KinEASE™

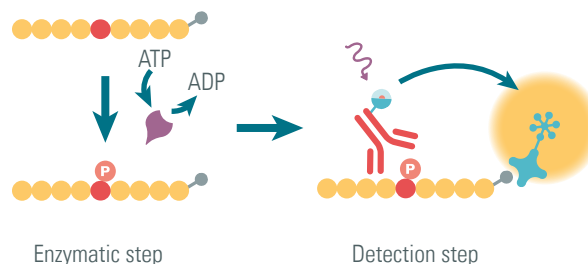
## 5 kits to cover Serine/Threonine and Tyrosine Kinases

Five highly sensitive universal kinase assays that have been fully validated for over 200 Ser/Thr and Tyr kinases. Each kit includes a universal biotinylated substrate, a Eu<sup>3+</sup>-cryptate-labeled monoclonal antibody, SA-XL665, and assay buffers.

## Serine/Threonine assays

| Product                         | Size         | Part #   |
|---------------------------------|--------------|----------|
| HTRF® KinEASE STK Discovery kit | 1 000 tests  | 62STOPEB |
| HTRF® KinEASE -STK S1 kit       | 1 000 tests* | 62ST1PEB |
| HTRF® KinEASE -STK S2 kit       | 1 000 tests* | 62ST2PEB |
| HTRF® KinEASE -STK S3 kit       | 1 000 tests* | 62ST3PEB |

Also available under \* 20 000 tests

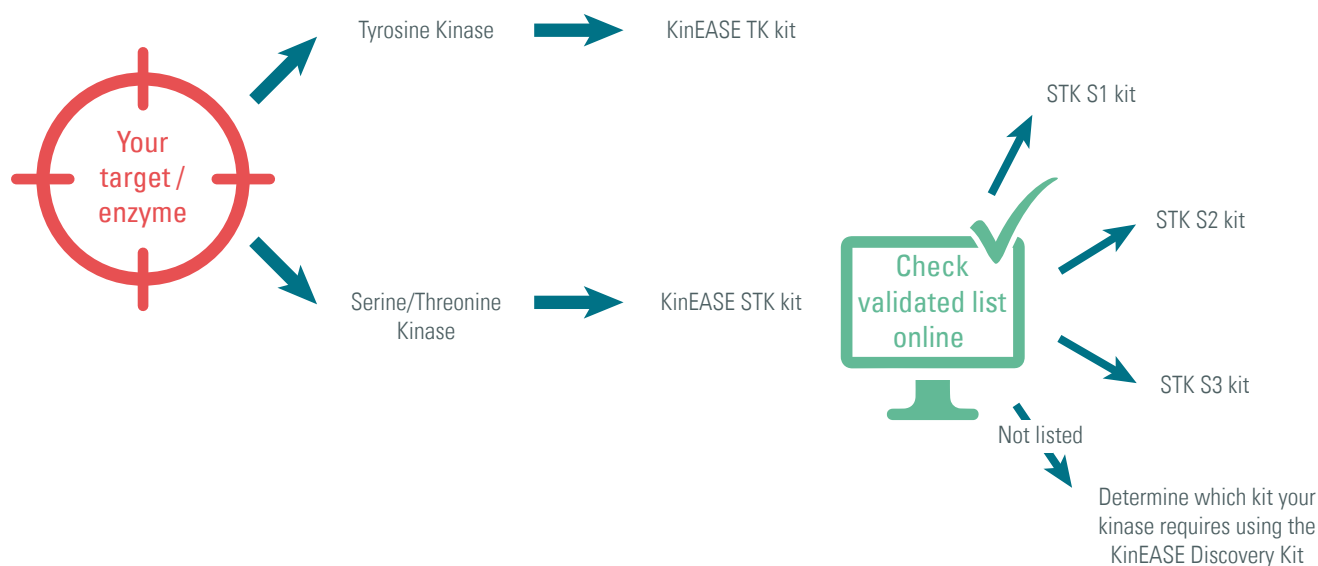


## Tyrosine assay

| Product              | Size         | Part #   |
|----------------------|--------------|----------|
| HTRF® KinEASE-TK kit | 1 000 tests* | 62TKOPEB |

Also available under 20 000 tests

## Find the right assay for your kinase



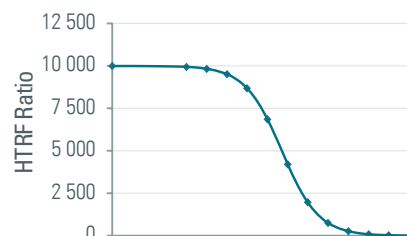
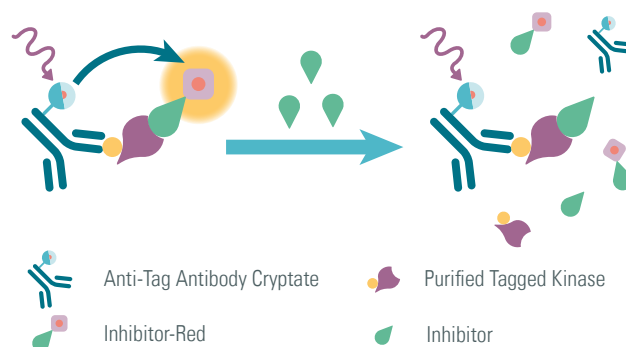
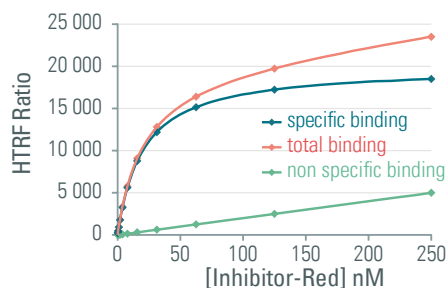
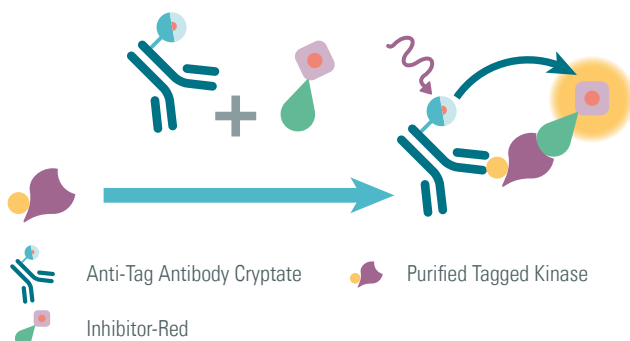
Bulk size available on request, contact us.

## Kinase binding assays

### Kinase binding, a complementary approach to enzyme activity monitoring

An assortment of kits and reagents engineered to monitor the specific binding of Serine/Threonine and Tyrosine kinases to their ATP-competitive inhibitor. Each discovery kit includes an anti-tag Eu<sup>3+</sup>-cryptate-labeled antibody (GST, 6HIS and biotin available) and all three fluorophore-coupled inhibitors (Staurosporine, Dasatinib and Sunitinib). Antibody and inhibitor conjugates are also available separately.

- Focus on type I, II and III inhibitors
- Adapted to challenging situations
  - inactive enzyme
  - mutated enzyme
  - unknown substrate
- Enzyme specific (no signal from potential media kinase activity)
- Access kinetic binding for pharmacodynamics and selectivity studies



| Product   | Size          | Part #     |
|---|---------------|------------|
| Kinase-GST Binding Discovery kit <b>NEW</b>         |               | 62KBD01PEA |
| Kinase-6HIS Binding Discovery kit <b>NEW</b>        |               | 62KBD02PEA |
| Kinase-Biotin Binding Discovery kit <b>NEW</b>      |               | 62KBD03PEA |
| Staurosporine-Red <b>NEW</b>                        | 1 nmole*      | 62KB01REDC |
| Dasatinib-Red <b>NEW</b>                            | 1 nmole*      | 62KB02REDC |
| Sunitinib-Red <b>NEW</b>                            | 1 nmole*      | 62KB03REDC |
| Mab Anti GST-Eu cryptate kinase Binding <b>NEW</b>  | 1 000 tests** | 62KBGSTKAF |
| Mab Anti 6His-Eu cryptate kinase Binding <b>NEW</b> | 1 000 tests** | 62KBHISKAF |
| Streptavidin-Eu cryptate kinase Binding <b>NEW</b>  | 1 000 tests** | 62KBSAKAF  |
| Kinase Binding Buffer <b>NEW</b>                    | 20 mL***      | 62KBRRDD   |

Also available under \* 20 nmol available; \*\*20 000 test-size available and \*\*\*200 mL



Optimize your kinase binding assays

Visit [www.cisbio.com/kinases](http://www.cisbio.com/kinases)

## Kinase-specific assays

### Kinase Toolbox

An extensive line of HTRF<sup>®</sup>-labeled, phospho-specific antibodies and substrates for the construction of high throughput Serine/Threonine and Tyrosine kinase assays.

### Serine/Threonine assays

| Product                                     | Size      | Part #   |
|---|-----------|----------|
| MAb Anti-phospho AKT-Eu cryptate            | 500 tests | 61P15KAE |
| PAb Anti-phospho AKT substrate-Eu cryptate  | 500 tests | 61P02KAE |
| PAb Anti-phospho ATF2-Eu cryptate           | 500 tests | 61P12KAE |
| PAb Anti-phospho C-JUN-Eu cryptate          | 500 tests | 61P14KAE |
| MAb Anti-phospho CREB-Eu cryptate           | 500 tests | 61P13KAE |
| MAb Anti-phospho ELK-1-Eu cryptate          | 500 tests | 61P11KAE |
| MAb Anti-phospho histone H3-Eu cryptate     | 500 tests | 61P07KAE |
| PAb Anti-phospho I kappaB alpha-Eu cryptate | 500 tests | 61P06KAE |
| PAb Anti-phospho MEK1/2-Eu cryptate         | 500 tests | 61P17KAE |
| MAb Anti-phospho P38-Eu cryptate            | 500 tests | 61P04KAE |
| MAb Anti-phospho p44/42-Eu cryptate         | 500 tests | 61P10KAE |
| MAb Anti-phospho p53-Eu cryptate            | 500 tests | 61P08KAE |
| PAb Anti-phospho PKA substrate-Eu cryptate  | 500 tests | 61P01KAE |
| PAb Anti-phospho PKC substrate-Eu cryptate  | 500 tests | 61P03KAE |
| MAb Anti-phospho SAP/JNK-Eu cryptate        | 500 tests | 61P09KAE |
| PAb Antiphospho threonine-Eu cryptate       | 500 tests | 61PTRKAE |

Also available under 10 000 tests

### Tyrosine assays

| Product              | Size        | Part #   |
|----------------------|-------------|----------|
| MAb PT66-Eu cryptate | 5 000 tests | 61T66KLA |
| MAb PY20-Eu cryptate | 5 000 tests | 61Y20KLA |

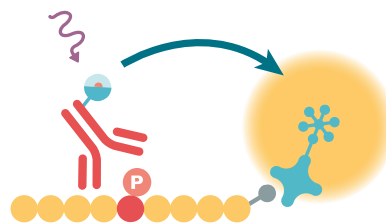
Also available under 20 000 tests

### Substrate for Tyrosine assays

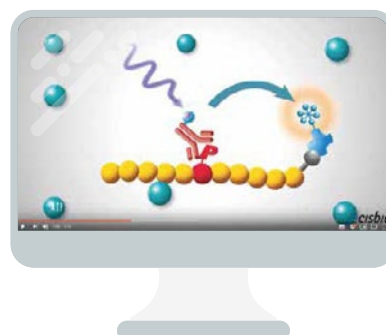
| Product       | Size        | Part #   |
|---------------|-------------|----------|
| PolyGT-Biotin | 5 000 tests | 61GT0BLA |

Also available under 100 000 tests

See the Tools for Assay Development & PPIs section in this catalog (p. 21) for a listing of the anti-tag reagents labeled with acceptors that can be combined with phospho-specific antibodies to build your assay.



Detection step



**How to run KinEASE**  
Visit Cisbio's Youtube channel

# Epigenetics

## Applications

- Detecting peptide, nucleosome, full histone, DNA, RNA, and small molecule modifications
- Screening and characterization of enzyme inhibitors

## Product Platform

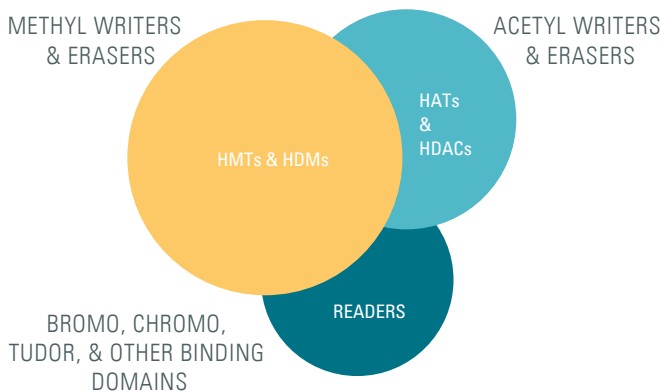
EPIgeneous® Cellular Assays

EPIgeneous® Biochemical Assays

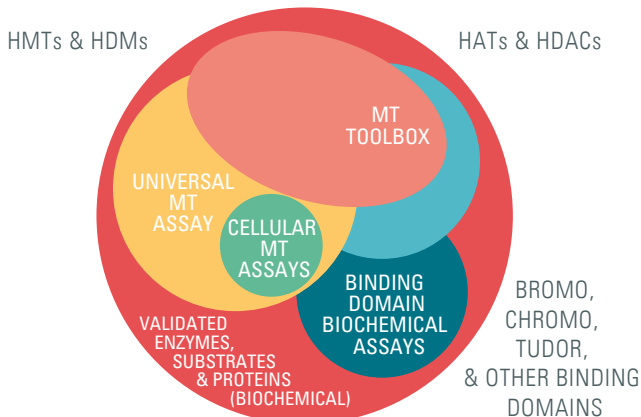
Epigenetic Proteins from Reaction Biology

Universal Methyltransferase Assay

### TARGETS



### SOLUTIONS



Over the past ten years, significant progress has been made in understanding the key role that epigenetic modifications play in regulating cell activity, and their implications for cell health and disease progression.

Cisbio provides a way to explore epigenetic enzymes and proteins such as histone methyltransferases (HMT), demethylases (HDMT), deacetylases (HDAC), sirtuins, and binding domains as druggable targets.

We offer EPIgeneous® products, a dedicated line of kits in biochemical and cellular formats for investigations of DNA methyltransferases (DNMTs), HDMTs, HMTs, HDACs, and Ubiquitin ligases. We also provide epigenetic enzymes, substrates, and protein binding domains from Reaction Biology.

Discover our products

[www.cisbio.com/epigenetics-universe](http://www.cisbio.com/epigenetics-universe)

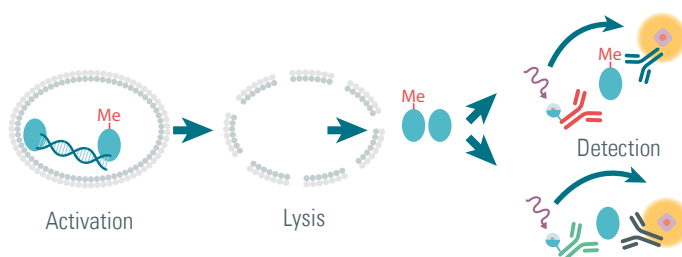


## EPIgeneous® cellular assays

Homogeneous, highly sensitive cell-based assays for measuring total histone H3 protein or mark-specific epigenetic Histone H3 modifications. These assays are compatible with both adherent and suspension cells.

| Product                 | Size      | Part #   |
|-------------------------|-----------|----------|
| Total H3 cellular assay | 500 tests | 62NH3PAE |
| H3K27Me3 cellular assay | 500 tests | 62KC3PAE |
| H3K36Me2 cellular assay | 500 tests | 62KD2PAE |
| H3K4Me2 cellular assay  | 500 tests | 62KA2PAE |

Also available under 10 000 tests



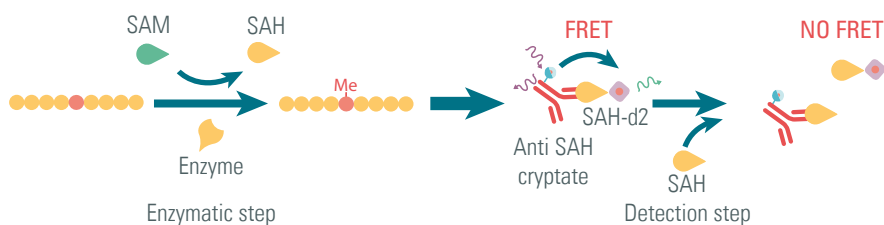
## EPIgeneous® biochemical assays

### Universal Methyltransferase Assay kit

A universal biochemical HTRF® assay for rapidly measuring the activity of all methyltransferase enzymes that produce S-adenosylhomocysteine (SAH), including the histone (HMTs) and DNA (DNMTs) methyltransferase families. This competitive immunoassay directly detects the level of SAH within samples directly.

| Product                 | Size        | Part #    |
|-------------------------|-------------|-----------|
| Methyltransferase assay | 1 000 tests | 62SAHPPEB |

Also available under 10 000 tests



Bulk size available on request, contact us.

## Epigenetic Toolbox

A panel of ready-to-use Eu<sup>3+</sup> cryptate-labeled monoclonal antibodies for constructing methyltransferase (HMT), demethylase (HDM), and deacetylation (HDAC) assays.

Each anti-histone HTRF<sup>®</sup> methylation antibody is specific for a single histone H3 lysine residue and methylation mark. Antibodies against the unmodified form of specific H3 residues can also be used to create HDAC assays.

The tables below give examples of the enzymatic assays that can be set up for a given epigenetic mark.

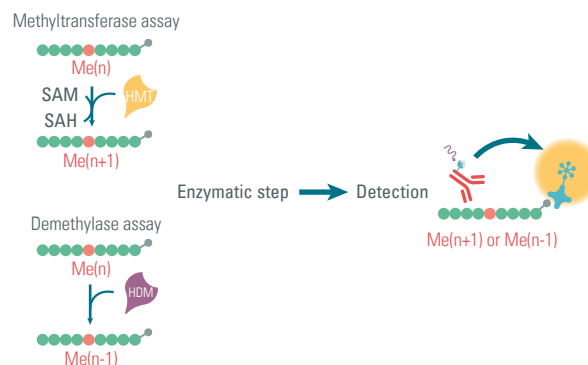
| Methyl transferase | Location & mark | Biotinylated substrate | MAB      |
|--------------------|-----------------|------------------------|----------|
| SET7/9             | K4 me0 → me1    | H3(1-21)K4me0          | H3K4me1  |
| JARID1A            | K4 me3 → me2    | H3(1-21)K4me3          | H3K4me2  |
| JARID1C            | K4 me3 → me2    | H3(1-21)K4me3          | H3K4me2  |
| MLL1/WARD          | K4 me0 → me2    | H3(1-50)K4me0          | H3K4me2  |
| MLL1/WARD          | K4 me0 → me3    | H3(1-50)K4me0          | H3K4me3  |
| G9a                | K9 me0 → me2    | H3(1-21)K9me0          | H3K9me2  |
| G9a                | K9 me1 → me2    | H3(1-21)K9me1          | H3K9me2  |
| G9a                | K27 me0 → me1   | H3(21-44)K27me0        | H3K27me1 |
| G9a                | K27 me0 → me2   | H3(21-44)K27me0        | H3K27me2 |
| EZH2(Y641F)        | K27 me0 → me3   | H3(1-50)K27me0         | H3K27me3 |

| Deacetylase | Location & mark    | Biotinylated substrate | MAB     |
|-------------|--------------------|------------------------|---------|
| HDAC1       | K9 Ac → unmodified | H3(1-21)K9Ac           | H3K9me0 |
| HDAC2       | K4 Ac → unmodified | H3(1-21)K4Ac           | H3K4me0 |
| HDAC2       | K4 Ac → unmodified | H3(1-21)K9Ac           | H3K9me0 |
| HDAC3       | K9 Ac → unmodified | H3(1-21)K9Ac           | H3K9me0 |
| HDAC6       | K9 Ac → unmodified | H3(1-21)K9Ac           | H3K9me0 |
| HDAC8       | K9 Ac → unmodified | H3(1-21)K9Ac           | H3K9me0 |
| SIRT1       | K9 Ac → unmodified | H3(1-21)K9Ac           | H3K9me0 |
| SIRT2       | K9 Ac → unmodified | H3(1-21)K9Ac           | H3K9me0 |
| SIRT3       | K9 Ac → unmodified | H3(1-21)K9Ac           | H3K9me0 |
| SIRT6       | K9 Ac → unmodified | H3(1-21)K9Ac           | H3K9me0 |

| Demethylase | Location & mark | Biotinylated substrate | MAB      |
|-------------|-----------------|------------------------|----------|
| LSD1        | K4 me1 → me0    | H3(1-21)K4me1          | H3K4me0  |
| LSD1        | K4 me2 → me0    | H3(1-21)K4me2          | H3K4me0  |
| JMJD1A      | K9 me2 → me0    | H3(1-21)K9me2          | H3K9me0  |
| JMJD2C      | K9 me3 → me2    | H3(1-21)K9me3          | H3K9me2  |
| JHDM1A      | K36 me2 → me1   | H3(21-44)K36me2        | H3K36me1 |
| JMJD2A      | K36 me3 → me2   | H3(21-44)K36me3        | H3K36me2 |

| Product                         | Size      | Part #   |
|---------------------------------|-----------|----------|
| MAB Anti histone H3K4 Me0Eu(K)  | 500 tests | 61KA0KAE |
| MAB Anti histone H3K4 Me1Eu(K)  | 500 tests | 61KA1KAE |
| MAB Anti histone H3K4 Me2Eu(K)  | 500 tests | 61KA2KAE |
| MAB Anti histone H3K4 Me3Eu(K)  | 500 tests | 61KA3KAE |
| MAB Anti histone H3K9 Me0Eu(K)  | 500 tests | 61KB0KAE |
| MAB Anti histone H3K9 Me1Eu(K)  | 500 tests | 61KB1KAE |
| MAB Anti histone H3K9 Me2Eu(K)  | 500 tests | 61KB2KAE |
| MAB Anti histone H3K27 Me1Eu(K) | 500 tests | 61KC1KAE |
| MAB Anti histone H3K27 Me2Eu(K) | 500 tests | 61KC2KAE |
| MAB Anti histone H3K27 Me3Eu(K) | 500 tests | 61KC3KAE |
| MAB Anti histone H3K36 Me1Eu(K) | 500 tests | 61KD1KAE |
| MAB Anti histone H3K36 Me2Eu(K) | 500 tests | 61KD2KAE |

Also available under 10 000 tests

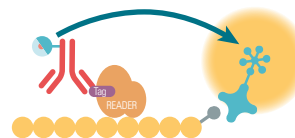


## Epigenetic Binding Domain assays

Three assay kits (A, B, and C) have been validated and fully optimized on a selection of 28 key binding domains, including bromo-, chromo-, tudor- and MBT domains. For non-validated reader domains, a fourth kit, the Discovery Kit, enables you to profile which of the A, B, or C kits offers the best assay solution. All kits are based on a GST-tagged Binding Domain /biotin-coupled Histone peptide format.

| Product                      | Size       | Part #   |
|------------------------------|------------|----------|
| Binding Domain Discovery kit | 500 tests  | 62BDDPEG |
| Binding Domain kit A         | 500 tests* | 62BDAPEG |
| Binding Domain kit B         | 500 tests* | 62BDBPEG |
| Binding Domain kit C         | 500 tests* | 62BDCPEG |

Also available under \*10 000 tests

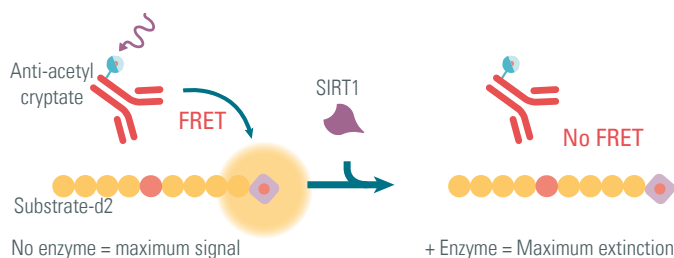


## SIRT-1 Assay

Ready-to-use HTRF® kit for measuring human SIRT1 deacetylase activity. This assay enables the discrimination of polyphenolic compounds and can be used for the rapid identification of both inhibitors and activators of SIRT1.

| Product    | Size        | Part #   |
|------------|-------------|----------|
| SIRT 1 kit | 1 000 tests | 64SI1PEB |

Also available under 20 000 tests





## Epigenetic proteins from Reaction Biology

A large collection of high quality epigenetic enzymes, substrates, proteins, reference inhibitors, and binding domains that can be used in combination with EPIgeneous® assays. The list is permanently evolving with new product additions. Visit [www.cisbio.com/epigenetics-universe](http://www.cisbio.com/epigenetics-universe) to get the most recent update!

### Enzymes

Highly active & purified enzymes, fully validated with progression curves, kinetics, and optimized substrates. Potency references available with commercially available inhibitors.

*Check out RBC's latest catalog version at [www.cisbio.com/epigenetics-universe](http://www.cisbio.com/epigenetics-universe) for a selection of available epigenetic enzymes.*

### Substrates & purified proteins

Tagged and untagged substrates used for Histone methyl- or acetyl- transferase assays. High purity proteins with strong batch-to-batch consistency.

*Check out RBC's latest catalog version at [www.cisbio.com/epigenetics-universe](http://www.cisbio.com/epigenetics-universe) for a selection of available substrates and proteins.*

### Reference epigenetic inhibitors

A selection of epigenetic inhibitors and probes.

*Check out RBC's latest catalog version at [www.cisbio.com/epigenetics-universe](http://www.cisbio.com/epigenetics-universe) for a selection of available inhibitors*

### Binding domains

A line of highly purified human recombinant bromodomains.

*Check out RBC's latest catalog version at [www.cisbio.com/epigenetics-universe](http://www.cisbio.com/epigenetics-universe) for a selection of available binding domains.*



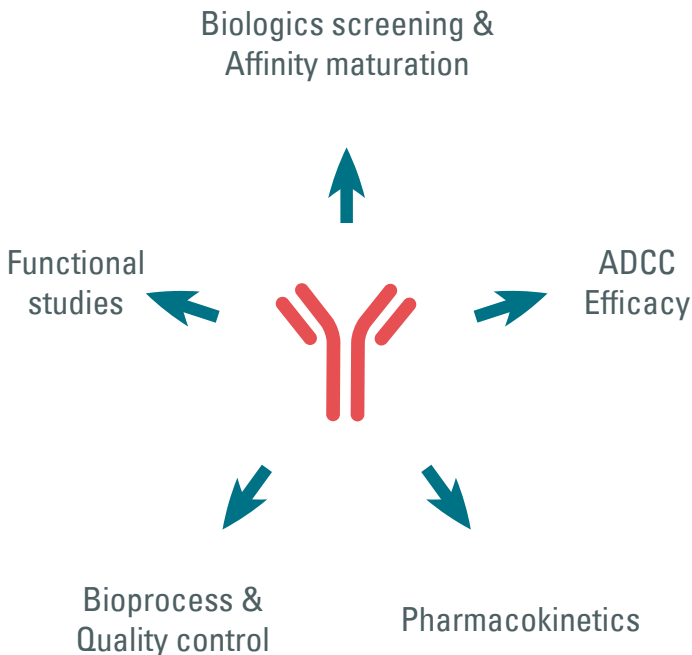
# Biotherapeutics

## Applications

- Clone selection
- Antibody screening
- Antibody mechanism of action studies
- Bio-similar and bio-better antibody screening
- Affinity maturation
- IgG quantification
- Quality control

## Product Platform

- ADCC investigation
- Clone screening & bioproduction
- Therapeutic antibody screening



Cisbio's Biotherapeutic suite of HTRF<sup>®</sup>- and Tag-lite<sup>®</sup>-based assays enables researchers to switch from time- and labor-intensive ELISAs to higher throughput assays for the rapid development and manufacturing of potent, highly-selective antibodies.

Cisbio's biotherapeutic assays range from sophisticated cellular mechanism-of-action assays, such as cytokines and second messenger analysis and cell based Fc-binding assays, to simple IgG detection useful during clone screening, bioproduction monitoring, and quality control.

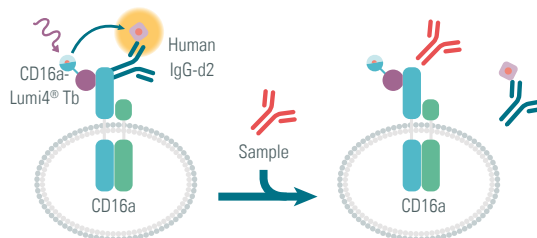
## ADCC check kits

### Fc Gamma Receptor (FcγR) and Neonatal Fc (FcRn) Binding assays

Tag-lite®-based cellular assays for measuring FcγR-specific antibody binding. These assays are ideal for predicting antibodies with strong ADCC activity and longer circulating half-lives. They can also be used to assess the degree of antibody afucosylation.

| Product                             | Size       | Part #      |
|-------------------------------------|------------|-------------|
| CD16a (FcγRIIIa, F158) cellular kit | 100 tests* | 6FR3APAG    |
| CD16a (FcγRIIIa, V158) cellular kit | 100 tests* | 62C16PAG    |
| CD32a (FcγRIIa, H131) cellular kit  | 100 tests* | 6FRAHPAG    |
| CD32a (FcγRIIa, R131) cellular kit  | 100 tests* | 6FRARPAG    |
| CD32b (FcγRIIb) cellular kit        | 100 tests* | 6FR2BPAG    |
| CD64 (FcγRI) cellular kit           | 100 tests* | 6FC64PAG    |
| FcRn kit                            | 100 tests  | 63ADK045PEG |

Also available under \* 5 and 10 x 100 tests



### ADCC readouts

| Product              | Size      | Part #      |
|----------------------|-----------|-------------|
| Human Granzyme B kit | 500 tests | 63ADK095PEH |
| Human Perforin-1 kit | 500 tests | 63ADK100PEG |

Also available under 10 000 tests

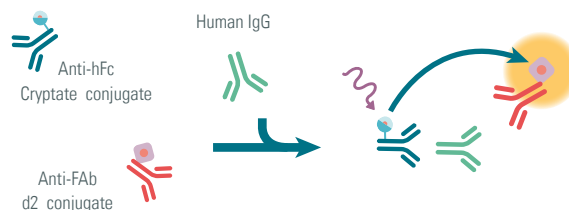
## Clone screening & bioproduction

### IgG Kits

Ready-to-use kits to quantify human and mouse IgGs, human Kappa and Lambda light chains, and human Fc-containing proteins. These assays offer a homogeneous, easily miniaturized alternative to conventional ELISAs.

| Product        | Size      | Part #   |
|----------------|-----------|----------|
| Human Fc kit   | 500 tests | 62HFCPEG |
| Mouse Fc kit   | 500 tests | 6FMIGPEG |
| Rabbit Fc kit  | 500 tests | 6FRIGPEG |
| Human IgG kit  | 500 tests | 6FHIGPEG |
| Kappa MAb kit  | 500 tests | 64KAPPEG |
| Lambda MAb kit | 500 tests | 64LAMPEG |

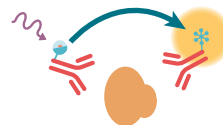
Also available under 10 000 tests



## CHO Host Cell Protein Assay

A ready-to-use kit for the rapid, high-throughput measurement of CHO host cell proteins (HCP). This assay is compatible with samples ranging from crude harvest materials to final products.

| Product     | Size      | Part #   |
|-------------|-----------|----------|
| CHO HCP kit | 500 tests | 6FHCPEEG |



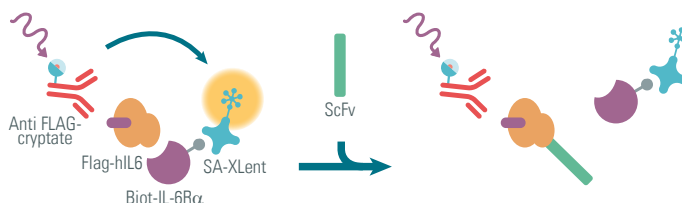
## Therapeutic antibody screening and affinity maturation

A comprehensive line of PPI reagents and Tag-lite®-based assays to screen therapeutic antibodies for their capacity to bind a soluble (biochemical) or cell-surface target-of-interest. Both HTRF® and Tag-lite® assays are homogeneous and high-throughput, and can be developed using a number of formats, such as direct binding assays, competition based immunoassays, and indirect assays using fusion proteins.

### Biochemical Target

Biologics selection and engineering are key steps in order to reach low picomolar affinities. The full product line of PPI reagents is the ideal solution for screening biologics and running affinity maturation studies.

Check out [www.cisbio.com/interactome-universe](http://www.cisbio.com/interactome-universe) for product-specific information.



### Cell Surface Target

The panel of Tag-lite® assays enables the rapid selection and affinity optimization of your Biologics on cell surface targets.

See *Ligand Binding Assays on p13* in this catalog.



# Custom Solutions



## Outsource your assay developments in total confidence!

Our expertise doesn't end with our extensive catalogue of over 750 kits and reagents. With Cisbio's custom solutions, you benefit from a team of experts who can help create the tools you are looking for.

Whatever your project needs, we have the people, experience, and resources to provide the ideal customized, scalable, efficient solution for your research.

- Custom labeling
- Assay development
- Compound profiling
- Drug-target kinetics with Excellerate

## Custom labeling

We label antibodies, peptides, nucleotides or other biomolecules with a wide array of fluorescent dyes for use in our assays. Thanks to our different labeling techniques and also the large variety of linkers and dyes, we are able to label many kinds of material.

All you need to do is select your fluorophore and send us your material to be labeled. Our experts will handle your labeling and keep you posted at every step of the way. It's that simple!



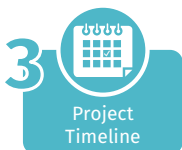
## Custom assay development

In 4-8 weeks, Cisbio will develop and deliver your customized assay.

An experienced Project Manager will evaluate your project's chance of success, then work with you to create a customized assay for the target you seek to explore, working in strict confidentiality. We will make sure that the solution works for you by running it on your equipment in your lab.

There is an approach for any need with our 3 custom assay options:

- Biochemical assay
- Cell-based assays
- ELISA conversion



## Profiling & Compound/Biologics characterization

Cisbio offers the opportunity to outsource the profiling of compounds. Working with small batches of up to 50 compounds, we perform dose-response experiments to validate your hits on a selected panel of assays from our catalog. The standard dose response is an 8-point serial dilution of the compound, done in triplicate.

Our profiling services include:

- Protein-protein interaction.
- Receptors that recognize the Fc portion of IgG.
- GPCR binding assays
- Phosphodiesterase assays

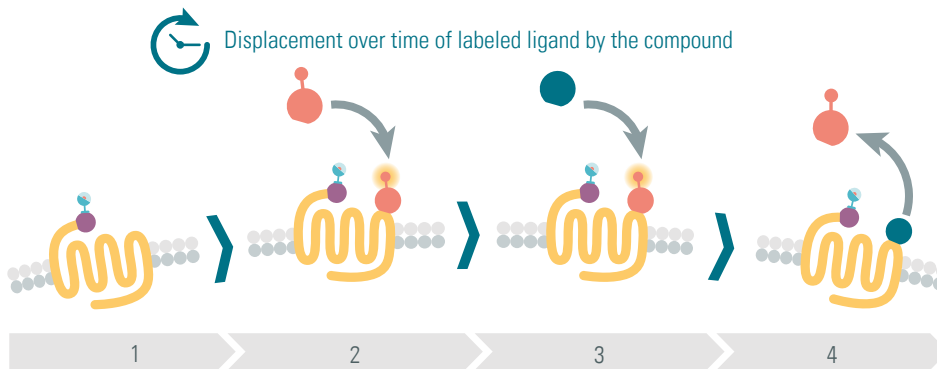
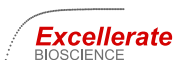


## Drug-target kinetics

Tag-lite® enables the kinetic screening of fragment-based libraries at membrane proteins in their natural plasma membrane environment.

Cisbio will measure your compound's  $K_{on}$ ,  $K_{off}$  and residence time for you\*.

\*Service delivered by Excellerate in Europe.



Customer support



Unrivalled expertise



Customer-centric approach



Consistency and persistence

# HTRF<sup>®</sup> technology

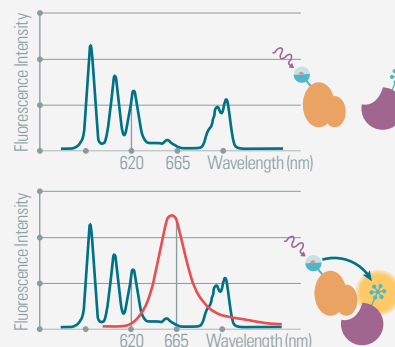
## How does it work?

### HTRF<sup>®</sup> technology combines standard FRET with time-resolved measurement of fluorescence

FRET (Fluorescence Resonance Energy Transfer) is based on the transfer of energy between two fluorophores, a donor and an acceptor, when in close proximity.

When two entities come close enough to each other, excitation of the donor by an energy source (e.g. a flash lamp or a laser) triggers an energy transfer towards the acceptor, which in turn emits specific fluorescence at a given wavelength.

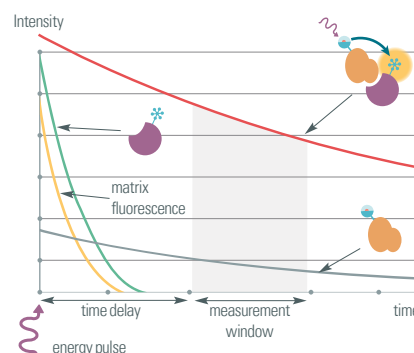
The detection of specific fluorescence at the acceptor's maximum emission wavelength (i.e. 665 nm, shown in red) is a sign that FRET has occurred, due to the proximity of the two interacting partners.



Time-resolved measurement of fluorescence eliminates short-lived background fluorescence from sample components.

The HTRF<sup>®</sup> donors have a long fluorescence life. The energy pulse from the excitation source (flash lamp, laser) is then immediately followed by a time delay, allowing interfering short-lived fluorescence (compounds, proteins, medium, etc.) to decay.

Because of these spectral properties, a donor-acceptor complex can be detected without the need for physical separation from the unbound partners. Fully homogeneous, HTRF<sup>®</sup> does not require separation steps such as centrifuging, washing, filtration, or magnetic partitioning.



### HTRF<sup>®</sup> fluorescent partners

The HTRF<sup>®</sup> energy donor consists of a rare earth complex in which the lanthanide ion is tightly embedded in a macro cycle. The unique HTRF<sup>®</sup> cryptate structure produces stable emissions under a wide range of chemical conditions. These properties enhance the assay window, overall sensitivity, and technology robustness.

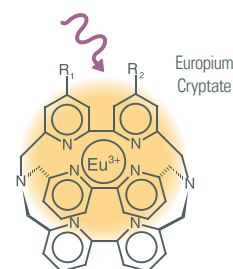
HTRF<sup>®</sup> uses various fluorophores, donors, and acceptors to form several TR-FRET pairs with the required FRET properties.

Two HTRF<sup>®</sup> donor fluorophores:

- Europium cryptate (Eu<sup>3+</sup> cryptate)
- Lumi4<sup>®</sup>-Terbium cryptate (Tb<sup>3+</sup> cryptate)

Two HTRF<sup>®</sup> acceptor fluorophores:

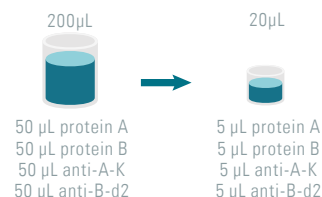
- XL665
- d2



## Incomparable miniaturization capabilities

Fluorescence intensity is concentration-dependent rather than quantity-dependent, unlike radioactivity and luminescence.

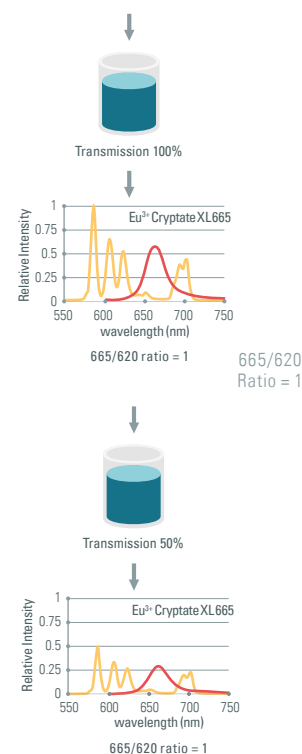
Proportional reagent volume downsizing offers a straightforward way to miniaturize HTRF® assays to high density formats such as 384 low-volume or 1 536-well plates.



## Ratiometric measurement is critical for eliminating compound interference

HTRF® emissions are measured at two wavelengths, and the ratio of the fluorescence of the acceptor over that of the donor is calculated.

Emissions at 620 nm (donor fluorescence) are used as an internal reference, while emissions at 665 nm (acceptor fluorescence) are used as an indicator of the biological reaction being assessed. A filter effect may occur because of differences in medium additives and/or compound concentrations, which leads to a decrease in the excitation energy delivered. The fluorescence ratio compensates for this phenomenon because both acceptor and donor emissions are affected in the same manner.



How complete is your knowledge?

Are you already an expert in TR-FRET?

Read this booklet to access the full potential of HTRF® and optimize your drug discovery research.

or

You haven't used TR-FRET yet?

Discover HTRF® technology essentials to get started with HTRF® for your own applications.



**It's time to unleash your potential!**

Visit <http://learn.cisbio.com/get-your-htrf-guide> and download your guide now





## Microplates

### The right plate for a successful assay

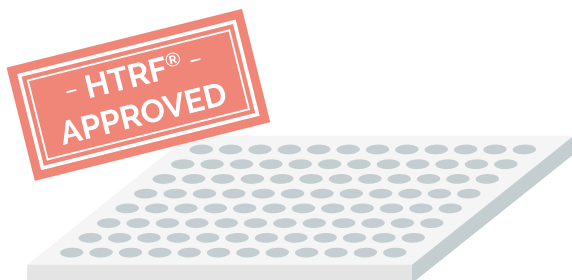
Cisbio's 96-well and 384-well low-volume microplates have been carefully designed to provide the best signal detection environment possible for all HTRF® assays: second messengers, phospho-proteins, cytokines, biomarkers and more....

They can be used in a no-transfer protocol with suspension cells or with a transfer step for adherent cells.

These plates can be read on all HTRF® certified readers, thus making their implementation in your experiments really easy.

### HTRF® 96-well plate

| Product                        | Size       | Part #    |
|--------------------------------|------------|-----------|
| HTRF® 96 well low volume plate | 1 plate    | 66PL96001 |
| HTRF® 96 well low volume plate | 5 plates   | 66PL96005 |
| HTRF® 96 well low volume plate | 25 plates  | 66PL96025 |
| HTRF® 96 well low volume plate | 100 plates | 66PL96100 |



More information on  
[www.cisbio.com/plates](http://www.cisbio.com/plates)



### HTRF® 384-well plate

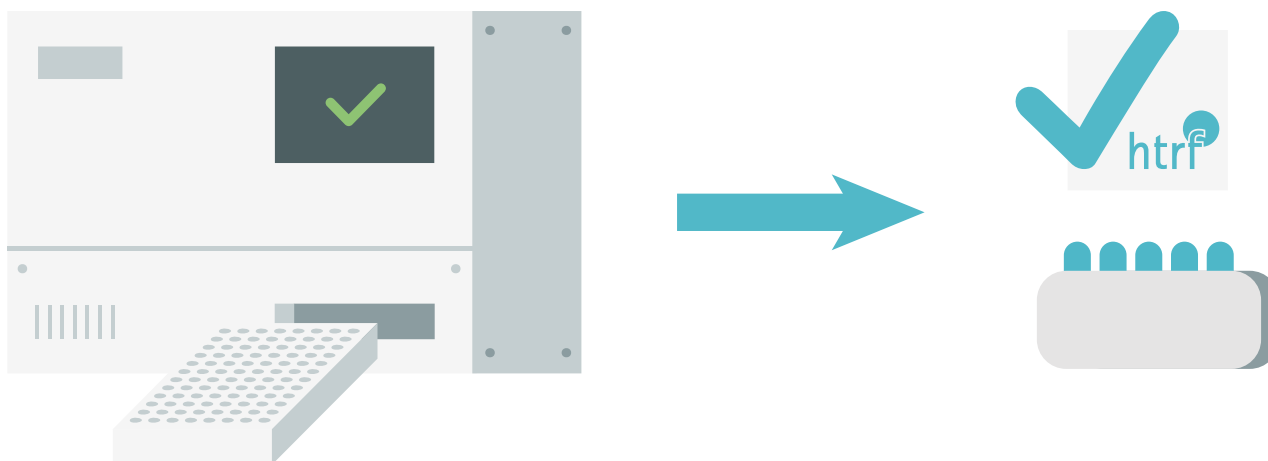
| Product                                    | Size       | Part #     |
|--|------------|------------|
| HTRF® 384 well low volume plate <b>NEW</b> | 25 plates  | 66PL384025 |
| HTRF® 384 well low volume plate <b>NEW</b> | 100 plates | 66PL384100 |



## Readers

### Readers with HTRF® high standard certification

In order to broaden HTRF® readout capabilities for use in the field of life sciences but also to ensure some freedom and flexibility in your reader choice, Cisbio has initiated partnerships with several detection system manufacturers. These collaborations have led to high standard reader certification which guarantees that the readers concerned meet all specifications for optimal HTRF® readout.



Your reader might be suitable even if it's not certified.

Visit [www.cisbio.com/readers](http://www.cisbio.com/readers).

# Discover a whole content galaxy about HTRF<sup>®</sup> applications

Follow us on





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[www.cisbio.com](http://www.cisbio.com)

