

Nanobind[®] PanDNA kit

HMW DNA 萃取最佳選擇

PacBio

單一 Kit 即可泛用於多種樣本

全新【PacBio[®] Nanobind[®] PanDNA kit】巧妙地將原先針對不同類型樣本的萃取技術整合為單一 Kit，打造出一個全方位的 DNA 萃取解決方案。PanDNA kit 能高效便利地自培養細胞、細菌、全血、組織、植物細胞核以及昆蟲樣本中萃取出高品質的超長 DNA 片段，為您的定序實驗打下良好基礎！

一站式萃取體驗



裂解

PanDNA kit 獨有的試劑配方能游刃有餘地充分裂解各種不同類型樣本



結合

透過與 Nanobind 磁碟結合，DNA 將受到良好保護，減少剪切應力斷裂損傷情形，可最大程度保留 DNA 長度，從而有效獲取 HMW DNA



片段篩選

可搭配使用 [SRE*](#) 去除 <10 kb 的短片段序列，進一步提升 DNA 完整性

*Short Read Eliminator (需另購)

高品質 DNA 能貢獻更好的 HiFi Data

下表為 Nanobind[®] PanDNA kit 的實際實驗數據。可發現無論是哪種類型樣本，皆能獲得 4–16 µg 且長於 100 kb (昆蟲為 65 kb) 的 DNA 萃取產物。接著以 [Revio™ 系統](#) 進行定序，每片 SMRT[®] Cell 可獲得平均 103 Gb 的 HiFi Data，平均讀長為 15–17 kb。

Sample type	Input material	DNA yield	DNA mode size	HiFi mean read length	HiFi yield	Median QV
RBC lysed human whole blood	400 µL	9.5 µg	97 kb	17,518 bp	108 Gb	Q34
Human brain	6 mg	9.3 µg	195 kb	16,164 bp	119 Gb	Q36
Human skeletal muscle	33 mg	3.9 µg	126 kb	17,170 bp	101 Gb	Q33
Mouse lung	6 mg	9.1 µg	126 kb	16,975 bp	121 Gb	Q35
Ladybug	27 mg	5.3 µg	67 kb	16,034 bp	86 Gb	Q34
Apple leaf (nuclei prep)	1 g	11.3 µg	112 kb	15,598 bp	106 Gb	Q35
Tobacco leaf (nuclei prep)	1 g	16.5 µg	140 kb	14,649 bp	90 Gb	Q34

HiFi data yield from DNA sheared to 18–20 kb and size selected with the PacBio SRE kit. HiFi sequencing was performed on the Revio system with 225 pM loading and a P1 metric of 60–72%. HiFi data was analyzed with SMRT[®] Link v13.0.



奠定成功的定序基礎

PanDNA kit 可兼容不同樣本量和種類，幫助您建立客製化且高效的 DNA 萃取流程，獲取高品質 DNA 文庫並優化您的定序數據。

Sample type	Sample detail	Input amount	Time
Blood	Mammalian whole blood	200 µL	~1 hour
	Nucleated whole blood	2.5–20 µL	
	Red blood cell lysis	400 µL	<1.5 hours
Tissue (non-insect animals + humans)	Diverse tissue types	2–100 mg	~2.5 hours
Insect	Insect whole body or segment	>20 mg	
Plant	Plant leaf, nuclei prep	0.25–5 g	~1.5 hours
Cultured cell	Suspension cultured cells	1×10 ⁶ –5×10 ⁶ diploid human cells	~1 hour
	Adherent cultured cells		
Cultured bacteria	Gram-negative bacteria	5×10 ⁸ –5×10 ⁹ bacterial cells	
	Gram-positive bacteria		

Sample details and extraction procedure duration for diverse sample types.

訂購資訊

訂購編號	產品名稱	產品目錄		
103-260-000	Nanobind PanDNA kit, 24 reactions HMW DNA extraction from cells, bacteria, blood, tissue, insect, and plant nuclei	 產品概述與範例數據		

更多定序樣本製備產品資訊請見：pacb.com/nanobind

或歡迎洽詢 PacBio 台灣代理 [伯森生技](#)

KEY REFERENCES

- [Technical note: Extracting HMW DNA from diverse insect samples using Nanobind PanDNA kit for optimal HiFi sequencing.](#)
- [Overview of Nanobind PanDNA kit.](#)
- [PacBio plant + animal applied markets brochure.](#)

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