

VWR[®] Life Science Seradigm Sera Products

- 01. NUTRITIONALLY
SUPERIOR SERA
- 02. PROVEN
PERFORMANCE &
CONSISTENCY
- 03. SUPPLY STABILITY
- 04. INDUSTRY-LEADING
TRACEABILITY &
QUALITY
- 05. UNMATCHED
OPERATIONAL
SUPPORT & SERVICE



ISIA Traceability
Certified Sera

Cells choose VWR® Life Science Seradigm

Cell culture experts everywhere are discovering how well their cells thrive on nutritionally superior sera from VWR Life Science Seradigm, making it the fastest growing, global sera brand in the market! Seradigm's unique collection and manufacturing techniques preserve more of the naturally-occurring growth factors in sera that cells require to thrive. Our proven track record for performance and consistency enables sera users to switch to a brand that yields more of the results they seek – no matter the application, scale, or budget.

Contact us today and we'll help you discover why cells choose VWR Life Science Seradigm.

UNIVERSAL PRODUCT FEATURES*

- More nutritionally rich sera due to preservation of performance-enhancing factors
- Superior product performance, quality, traceability, and lot-to-lot consistency
- Quality you can see — crystal clear sera, vibrant amber color, and absence of turbidity and flocculent matter
- Bottle-to-bottle consistency within lots through proprietary, whole-lot homogenization technology
- Low levels of endotoxin and hemoglobin as indicators of overall product quality

*Some features do not apply to BCS.

Learn more about the
fastest growing, global
sera brand in the market!
[VWR.COM/SERADIGM](https://www.vwr.com/seradigm)

VWR® Life Science Seradigm Fetal Bovine Sera (FBS) and FBS Alternatives



ULTIMATE GRADE FETAL BOVINE SERUM (FBS)

Ultimate Grade FBS is the ultimate in product quality and viral safety, undergoing additional BVD virus testing using qPCR technology. Proprietary collection and production techniques provide additional features that elevate product quality, enhance traceability, and improve regulatory compliance. Ultimate Grade FBS is 100% US origin.

Process	Size, mL	Cat. No.	Unit
None	50	89510-198	Each
Heat-Inactivated	50	89510-200	Each
None	500	97068-101	Each
Heat-Inactivated	500	97068-107	Each

Gamma Irradiation available upon request.



PREMIUM GRADE FETAL BOVINE SERUM (FBS)

Premium Grade FBS is widely used by cell culturists requiring high quality, high performance FBS for a variety of applications. Proprietary manufacturing technology preserves performance-enhancing factors for consistent results. Premium Grade FBS is 100% US origin.

Process	Size, mL	Cat. No.	Unit
None	50	89510-194	Each
Heat-Inactivated	50	89510-196	Each
None	500	97068-085	Each
Heat-Inactivated	500	97068-091	Each

Gamma Irradiation available upon request.



USDA APPROVED ORIGIN FETAL BOVINE ORIGIN (FBS)

USDA Approved Origin FBS is an affordable, quality product that provides consistent performance for use in cost-sensitive applications. USDA Approved Origin FBS is sourced from Mexico and countries in Central America.

Process	Size, mL	Cat. No.	Unit
None	50	89510-182	Each
Heat Inactivated	50	89510-184	Each
None	500	89510-186	Each
Heat Inactivated	500	89510-188	Each

Not available in Canada or Europe.



ULTRA LOW IgG FETAL BOVINE SERUM (FBS)

Ultra Low IgG FBS is purified of immunoglobulin (IgG) using a chromatographic process that delivers significantly reduced levels of IgG ($\leq 5\mu\text{g/mL}$). Ultra low IgG FBS is ideal for cell culture and protein purification applications where naturally occurring levels of IgG are too high. Ultra Low IgG FBS is 100% US origin.

Process	Size, mL	Cat. No.	Unit
None	50	10018-828	Each
Heat-Inactivated	50	10018-832	Each
None	500	10018-826	Each
Heat-Inactivated	500	10018-830	Each

Gamma Irradiation available upon request.



FB ESSENCE

FB Essence is a nutritionally rich, cost-effective alternative to Fetal Bovine Serum (FBS) and is proven effective across a broad range of cell types and origins, including both suspension and adherent cell types and recognized finicky cell lines. FB Essence contains FBS, Bovine Calf Serum, Equine Serum, and a proprietary blend of supplements, vitamins, minerals, and growth factors. FB Essence is 100% US Origin.

Process	Size, mL	Cat. No.	Unit
None	50	10805-184	Each
Heat Inactivated	50	10799-384	Each
None	500	10803-034	Each
Heat Inactivated	500	10799-390	Each

Gamma Irradiation available upon request.



IRON SUPPLEMENTED BOVINE CALF SERUM (BCS)

Iron Supplemented Bovine Calf Serum is sourced from animals aged up to six months and raised on a diet consisting mainly of formula. Due to their unique diet, source animals have naturally high levels of transferrin. When the serum is supplemented with iron, the iron binds to the unbound transferrin, resulting in a product with three to four times the amount of available iron compared to FBS or equine serum. This product is an excellent, cost-effective alternative to FBS and often performs as well as FBS in many established cell lines. In some applications, it even out-performs FBS and equine serum. Iron Supplemented Bovine Calf Serum is 100% US Origin.

Process	Size, mL	Cat. No.	Unit
None	50	10158-360	Each
None	500	10158-358	Each
None	1000	10153-134	Each
Gamma Irradiated*	1000	10153-136	Each

*Gamma irradiated at a minimum of 25 kGy.

Product Differentiation Table

		FBS Products				FBS Alternatives	
		Ultimate Grade FBS	Premium Grade FBS	USDA Approved Origin FBS	Ultra Low IgG FBS	FB Essence	Bovine Calf Serum, Iron Supplemented
Country of Origin	100% US Origin	X	X		X	X	X
	USDA Approved Origin (Non-US)			X			
Product Features	Single-Use Filtration Technology	X	X	X	X	X	X
	Cold Temperature Manufactured	X	X	X		X	
	Class 100 Cleanroom Manufactured	X	X	X		X	
	Triple 0.1µm Sterile Filtered	X	X	X	X	X	
	Whole-lot Homogenous Technology	X	X	X	X	X	X
	Independently Tested by Third-Party Laboratories	X	X	X	X	X	X
Specifications	ISIA* Traceability Certified Sera	X	X	X	X	X	X
	Endotoxin**	≤ 10	≤ 20	≤ 30	≤ 20	≤ 20	≤ 20
	Hemoglobin**	≤ 25	≤ 25	≤ 30	≤ 25	≤ 25	≤ 30
	9CFR Virus Testing, Sterility, Mycoplasma	X	X	X	X	X	X
	Biochemical Assay	X	X	X	X	X	X
	Electrophoretic Profile	X	X	X	X	X	X
	Additional Virus Testing by qPCR Technology	X					

*International Serum Industry Association (serumindustry.org)

** The care and attention devoted to the manufacture of our sera generates final test results that are substantially lower than set specifications. See lot-specific Certificates of Analysis for actual test results.



ISIA Certified Traceability

The International Serum Industry Association (ISIA) has established industry standards to aid sera users in substantiating the traceability of serum products. The ISIA has implemented a rigid program of independent audits to verify compliance with traceability standards. ISIA Traceability Certification is awarded to those that demonstrate full compliance with ISIA guidelines and are the subject of a successful audit. Further, the ISIA has established strict guidelines for product quality testing and reporting on documents like Certificates of Analysis (CoA). Sera users should source exclusively from ISIA-certified companies to ensure traceability.



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