PRODUCT DESCRIPTION

Exosome-Depleted Fetal Bovine Serum (FBS) is a high-quality, biological product used in cell culture applications requiring reduced levels of exosomes. It is produced through a proprietary treatment process that efficiently removes microvesicles (exosomes) naturally present in standard FBS.

COUNTRY OF ORIGIN

Biowest USA ensures full traceability of the FBS, with the country of origin specified in the Certificate of Analysis (CoA). For more detailed information, please refer to the technical data sheet for standard Fetal Bovine Serum (Ref. TDS-001).

Catalog Number	Description	Origin(s)
S148X-50	Exosome-Depleted Fetal Bovine Serum	Refer to Certificate of Analysis
S148X-250		
S162X-50		
S162X-250		

INTENDED USE

This product is for in vitro research or further manufacturing only. It is not for human or animal consumption or for use as an Active Pharmaceutical Ingredient (API). The serum is ideal for applications where reduced exosome content is crucial for the study of cellular processes, exosome research, or stem cell work.

COLLECTION SOURCE

Fetal Bovine Serum is derived from clotted whole blood, aseptically collected from the fetus via cardiac puncture. The serum is collected and treated in compliance with USDA regulations. Our vertical integration system ensures full traceability of the serum throughout all stages—from collection to production and final packaging.

QUALITY CONTROL PARAMETERS

1.1	pH: monitored and reported for each batch, with specifications provided in the Certificate of Analysis (CoA).
1.2	Osmolality: determined by the lowering of the freezing temperature, calibrated against standard solutions. Osmolality specifications are provided in the Certificate of Analysis.
1.3	Endotoxin: tested using USP 85 Photometric Quantitative Techniques. Test results are reported in the Certificate of Analysis.
1.4	Hemoglobin: measured by spectrophotometry. Results are provided in the Certificate of Analysis.
1.5	Total Protein: determined using a colorimetric assay. Results are reported in the Certificate of Analysis.
1.6	Sterility Testing: tested for the absence of aerobic and anaerobic bacteria, fungi, and yeast in compliance with 9CFR regulations. 9CFR regulations ensure that FBS is free from harmful microbial contamination, making it safe for use in sensitive cell culture applications.
1.7	Mycoplasma: tested via culture-based methods or PCR (Polymerase Chain Reaction), depending on customer requirements. Tested for absence of Mycoplasma.
1.8	Other Testing: Additional testing may be available upon request depending on customer needs.

FILTRATION

Final Filter Size: 0.2µm

TREATMENT PROCESS: EXOSOME DEPLETION	
Exosome Depleted Serum undergoes a proprietary treatment that depletes microvesicles naturally present in the serum. The depletion rate is quantified using ELISA and NTA analysis, with an acceptance criterion of ≥ 95% depletion.	
STORAGE CONDITIONS	
Store at ≤ -10°C, protected from light to maintain the serum's integrity.	
SHELF LIFE	
5 years from the date of manufacture when stored under the recommended conditions.	
HANDLING INSTRUCTIONS	
2.1	Thawing: Thaw the serum in a refrigerator (2°C to 8°C) or at room temperature. Avoid rapid thawing methods to preserve protein integrity.
2.2	Aliquoting: For optimal preservation, aliquot the serum after thawing using aseptic techniques.
2.3	Storage after Thawing: The serum is recommended for use immediately after thawing. If not all the serum is used, it can be stored at +2°C to +8°C for up to 26 weeks without a significant decrease in cell culture performance, provided sterility is maintained.
2.4	Repeated Freeze/Thaw Cycles: To maintain serum quality, avoid repeated freeze/thaw cycles. Always refreeze aliquots, not the entire bottle.
PRECAUTIONS AND SAFETY	
3.1	For Research Use Only: Not for human or animal consumption.
3.2	Protective Equipment: Always wear appropriate PPE, such as gloves, lab coats, and face protection, when handling the serum.
3.3	Aseptic Handling: Ensure that serum is handled under aseptic conditions (e.g., laminar flow hood) to prevent contamination.
REGULATORY INFORMATION	
Fetal Bovine Serum complies with relevant regulations set by the USDA and other international bodies for collection, processing, and use.	
DISPOSAL INSTRUCTIONS	
Dispose of unused serum and packaging according to local regulations for biological materials and hazardous waste.	
CERTIFICATE OF ANALYSIS (CoA)	
A Certificate of Analysis is provided with each batch and contains detailed specifications, including test results for sterility, endotoxin levels, and other quality control parameters.	
DISCLAIMER	
This product is intended for research or further manufacturing only. Not for use as an Active Pharmaceutical Ingredient (API) or food or animal feed. Before use, users should refer to the Certificate of Analysis (CoA) for specific details.	

For further information or inquiries, please contact Biowest USA Customer Service.