PRODUCT DESCRIPTION

Lipid Depleted Fetal Bovine Serum (FBS) is a specially processed serum that has undergone treatment to remove lipids, making it ideal for applications where lipid interference is a concern. The serum is processed using a method involving fumed silica, which binds and removes lipids, leaving the remaining serum components intact for optimal cell culture use.

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)
S148L	Lipid-Depleted Fetal Bovine Serum	Refer to Certificate of Analysis
S162L		

INTENDED USE

This product is for in vitro research or further manufacturing only. It is not for human or animal consumption or use as an Active Pharmaceutical Ingredient (API). Lipid-depleted FBS is particularly useful for lipid metabolism studies, cell differentiation, and other specialized research.

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	Virus Testing: Testing is performed by inoculating permissive cell cultures and following the 9CFR 113.53c, 113.46, and 113.47 requirements. Each batch undergoes virus testing for the following pathogens: • Bovine Viral Diarrhea (BVD) • Infectious Bovine Rhinotracheitis (IBR) / BHV-1 • Parainfluenza Type 3 (PI3) • Bluetongue virus • Bovine Respiratory Syncytial Virus (BRSV)

	• Reovirus & Rabies virus
1.9	Other Testing: Additional testing may be available upon request depending on customer needs.
FILTRATION	
Final Filter Size: 0.2µm	
TREATMENT PROCESS: LIPID DEPLETION	
Lipid-depleted FBS undergoes a proprietary treatment where fumed silica is added under gentle agitation. The silica binds to the lipids, which are then removed through centrifugation. The serum is further purified with 0.2µm filtration. The treatment results in a cholesterol level lower than 10mg/dL, meeting the acceptance criteria for lipid 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 not intended as an Active Pharmaceutical Ingredient (API). It is intended for research, diagnostics, and medical device manufacturing only. Before use, users should refer to the Certificate of Analysis (CoA) for specific lot details.	

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