PRODUCT DESCRIPTION

Biowest USA Charcoal-Stripped Fetal Bovine Serum (FBS) is a high-quality, biologically derived product obtained from healthy bovine fetuses, aseptically collected via cardiac puncture. The serum undergoes a specialized purification process that includes charcoal-stripping, effectively removing lipophilic substances to ensure minimal interference from such materials.

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)
S148C	Charcoal-Stripped Fetal Bovine Serum	Refer to Certificate of Analysis
S162C		

INTENDED USE

Charcoal-stripped FBS is intended for in vitro use only. It is suitable for use in cell culture, diagnostic assays, and research applications, as well as the production of medical devices. This product is not for human or animal consumption and is not suitable for clinical or therapeutic use.

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.
FILTRATION	
Final Filter Size: 0.2µm	
TREATMENT PROCESS: CHARCOAL-STRIPPED SERUM	
Charcoal-stripped FBS undergoes a special treatment in which activated carbon is added to the serum under gentle agitation. The carbon is then removed by centrifugation, followed by 0.2µm filtration to ensure the serum is free from lipophilic materials. This process makes the serum suitable for applications requiring minimal interference from such substances.	
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: If not all serum is used, thawed serum may be stored at 2°C to 8°C for up to 26 weeks without significant loss in quality, 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, virus testing, 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.