

# CERTIFICATE OF ANALYSIS

**Product:** Fetal Bovine Serum  
**Grade:** Ultimate  
**Part Number:** 1600  
**Lot Number:** 082B11

**Product Origin:** Collected and Processed in USA  
**Filtration:** Triple 0.1µm Sterile Filtered  
**Manufacture Date:** March 2011  
**Expiration Date:** April 2016  
**Storage:** -10°C to -20°C

## CERTIFIED ANALYSIS

Test/Method	Unit of Measure	Specification	Result
<b>Bovine Viral Diarrhea Virus</b> (qPCR Technology)	N/A	Not Detected	Not Detected
<b>Endotoxin</b> (Limulus Amebocyte Lysate-Gel Clot, USP 85)	EU/mL	≤10	<0.06
<b>Hemoglobin</b> (Fleming & Woolf)	mg/dL	≤10	5.1
<b>Sterility</b> (Current USP for Bacteria & Fungi)	N/A	No Growth	No Growth
<b>Mycoplasma</b> (Barile & Kern; Large Volume, Direct Culture)	N/A	Not Detected	Not Detected
<b>pH</b> (USP 791)	N/A	Test & Report	7.2
<b>Osmolality</b> (USP 785)	mOsm/KgH2O	Test & Report	310.0
<b>Virus Testing</b> (9 CFR 113.53c)			
Bluetongue	N/A	Not Detected	Not Detected
Bovine Adenovirus	N/A	Not Detected	Not Detected
Bovine Parvovirus	N/A	Not Detected	Not Detected
Bovine Respiratory Syncytial Virus	N/A	Not Detected	Not Detected
Bovine Viral Diarrhea Virus	N/A	Not Detected	Not Detected
Rabies	N/A	Not Detected	Not Detected
Reovirus	N/A	Not Detected	Not Detected
Cytopathogenic Agents (IBR)	N/A	Not Detected	Not Detected
Hemadsorbing Agents (PI3)	N/A	Not Detected	Not Detected

## BIOCHEMICAL ASSAY

Test/Method	Unit of Measure	Result	Test/Method	Unit of Measure	Result
Albumin	g/dL	2.2	Glucose	mg/dL	99.0
Alkaline Phosphatase	U/L	260.0	Phosphorus	mg/dL	3.3
ALT (SGPT)	U/L	7.0	Potassium	mEq/L	>10.0
AST (SGOT)	U/L	48.0	Protein, Total	g/dL	3.8
Bilirubin – Total	mg/dL	0.2	Sodium	mEq/L	133.0
Calcium	mg/dL	13.3	Serum Iron	µg/dL	173.0
Chloride	mEq/L	97.0	Triglycerides	mg/dL	63.0
Cholesterol	mg/dL	30.0	Urea Nitrogen (BUN)	mg/dL	13.0
Creatinine	mg/dL	2.4	Uric Acid	mg/dL	2.2
			<b>Electrophoretic Profile</b>		
			Alpha	gm/dL	1.3
			Beta	gm/dL	0.3
			Gamma	gm/dL	Not detected
			Albumin %	N/A	57.9%
			Alpha %	N/A	34.2%
			Beta %	N/A	7.9%
			Gamma %	N/A	N/A

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## STATEMENTS

**Statement of Origin:** This product was manufactured from fetal bovine blood collected exclusively from approved harvest facilities. All fetal bovine serum used in this product is derived from fetuses collected from cows that are of United States origin and have passed ante- and post-mortem inspection. All harvest facilities are USDA inspected and located within the continental United States of America. All collection and processing activities are performed under the strict guidance of standard operating procedures.

**Statement of Intended Use:** This product is intended for further manufacturing or research use. This product is not intended for human or therapeutic use.

**ISIA Certified Traceability:** All raw serum is certified by the International Serum Industry Association (ISIA) to be sourced in accordance with their strict traceability guidelines ([www.serumindustry.org](http://www.serumindustry.org)).

**ISIA Compliant Documentation:** This document complies with all documentation standards issue by the ISIA regarding the definition, quality control, country of origin and certified analysis of fetal bovine serum ([www.serumindustry.org](http://www.serumindustry.org)).



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## QC DEPARTMENT APPROVAL

Electronic Signature: Devin Davis    Date: 16 May 2011

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