

# **CERTIFICATE OF ANALYSIS**

**Product:** Fetal Bovine Serum **Product Origin:** Collected and Processed in USA

Grade:UltimateFiltration:Triple 0.1μm Sterile FilteredPart Number:1600Manufacture Date:August 2014

Lot Number: 225B14 Expiration Date: September 2019
Total Volume: 517.0 Liters Storage: -10°C to -20°C

#### **CERTIFIED ANALYSIS**

Test/Method	Unit of Measure	Specification	Result
Bovine Viral Diarrhea Virus (qPCR Technology)	N/A	Not Detected	Not Detected
Endotoxin (Limulus Amebocyte Lysate-Gel Clot, USP 85)	EU/mL	<u>&lt;</u> 10	<2.0
Hemoglobin (Fleming & Woolf)	mg/dL	<u>&lt;</u> 25	13.5
Sterility (Current USP and EP 2.6.1 for Bacteria & Fungi)	N/A	No Growth	No Growth
Mycoplasma (Barile & Kern; Large Volume, Direct Culture)	N/A	Not Detected	Not Detected
<b>pH</b> (USP 791)	N/A	Test & Report	7.1
Osmolality (USP 785)	mOsm/KgH20	Test & Report	292.0
Virus Testing (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	gm/dL	2.2	Sodium	mEq/L	135.0
Alkaline Phosphatase	U/L	224.0	Triglycerides	mg/dL	59.0
ALT (SGPT)	U/L	6.0	Urea Nitrogen (BUN)	mg/dL	18.0
AST (SGOT)	U/L	44.0	Uric Acid	mg/dL	2.4
Bilirubin – Total	mg/dL	0.3	Electrophoretic Profile	N/A	Definitive
Calcium	mg/dL	15.0	Hormone Profile		
Chloride	mEq/L	99.0	Cortisol	μg/dL	<0.2
Cholesterol	mg/dL	32.0	Estradiol	pg/mL	24.07
Creatinine	mg/dL	2.4	Insulin	μIU/mL	5.72
Glucose	U/L	91.0	Progesterone	ng/mL	< 0.05
IgG (ELISA)	μg/dL	85.0	T3 Baseline	μg/dL	0.65
Phosphorus	mg/dL	9.4	T4 Baseline	ng/mL	10.92
Potassium	mEq/L	>10.0	Testosterone	ng/mL	0.19
Protein – Total	gm/dL	3.5			

#### **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).

**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).



## **QC DEPARTMENT APPROVAL**

Electronic Signature: Sherrie Praku Hirschi

Date: 15 September 2014

Sherrie Drake Hirschi