

# **CERTIFICATE OF ANALYSIS**

Product:Fetal Bovine SerumProduct Origin:Collected and Processed in USAGrade:UltimateFiltration:Triple 0.1μm Sterile Filtered

Grade: Ultimate
Part Number: 1600
Lot Number: 343R13

Manufacture Date: April 2011

Expiration Date: April 2016

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	<0.3
Hemoglobin (Fleming & Woolf)	mg/dL	<u>&lt;</u> 25	8.0
Sterility (Current USP 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	7.2
Osmolality (USP 785)	mOsm/KgH20	Test & Report	313
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	1.7	Potassium	mEq/L	>10.0
Alkaline Phosphatase	U/L	156.0	Protein – Total	gm/dL	3.5
ALT (SGPT)	U/L	6.0	Serum Iron	ug/dL	187.0
Amylase	U/L	9.0	Sodium	mEq/L	139.0
AST (SGOT)	U/L	45.0	TCO2 (Bicarbonate)	mEq/L	10.0
Bacteriophage (EPA1602)	Report	Negative	Tetracycline	μg/mL	<0.5
Bilirubin – Total	mg/dL	0.2	Triglyceride	mg/dL	64.0
Calcium	mg/dL	14.4	Urea Nitrogen (BUN)	mg/dL	15.0
Chloride	mEq/L	102.0	Uric Acid	mg/dL	2.6
Cholesterol	mg/dL	30.0	Electrophoretic Profile	N/A	Definitive
CK	U/L	252.0	Hormone Profile		
Creatinine	mg/dL	2.8	Cortisol	μg/dL	0.293
GGT	U/L	5.0	Estradiol	pg/mL	31.80
Glucose	U/L	111.0	Insulin	μIU/mL	7.18
IgG	μg/dL	205.0	Progesterone	ng/mL	0.08
Lipase	U/L	6.0	T3 Baseline	μg/dL	0.72
LDH	IU/L	524.0	T4 Baseline	ng/mL	11.46
Phosphorus	mg/dL	10.3	Testosterone	ng/mL	0.13

#### **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: Devin Davis Date: 11 March 2013