

Potassium

Sodium

mĔq/L

mEq/L

Certificate of Analysis and Origin

		07 He original catalo will be ameno Fe Ult 08 12 Ma 25 Co Tri	at Inactivated, Gamma Ir og # will appear on produc ded to reflect processing. tal Bovine Serum timate Grade 3B16 04.8 Liters orch 2016 oril 2021 April 2016 ollected and Processed in ple 0.1µm Sterile Filtered 0° to -20°C	t along with heat in	
Certified Analysis					
Test/Method Bovine Viral Diarrhea Virus (qPCR Technology) Endotoxin (USP 85) Hemoglobin (Fleming & Woolf) Total Protein Sterility (Current USP and EP 2.6.1 for Bacteria & Fungi) Mycoplasma (Barile & Kern; Large Volume, Direct Culture) pH (USP 791) Osmolality (USP 785)				Specification Not Detected ≤10 ≤25 3.0 to 4.5 No Growth Not Detected Test & Report Test & Report	Result Not Detected <0.10 12.25 3.5 No Growth Not Detected 7.25 296
Virus Testing (9 CFR Bluetongue Bovine Adenovirus Bovine Parvovirus Bovine Respiratory S Bovine Viral Diarrhea Rabies Reovirus Cytopathogenic Agen Hemadsorbing Agen	Syncytial Virus a Virus hts (IBR)		N/A N/A N/A N/A N/A N/A N/A N/A	Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected	Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected
Biochemical Assay					
Test/Method Albumin Alkaline Phosphatase ALT (SGPT) AST (SGOT)	Unit of Measure gm/dL U/L U/L U/L	Result 2.2 198 7 62	Test/Method Triglycerides Urea Nitrogen (BUN) Uric Acid Electrophoretic Prof	Unit of Measure mg/dL mg/dL mg/dL ile	Result 66 15 2.5
Bilirubin – Total Calcium Chloride Cholesterol - Total	mg/dL mg/dL mEq/L mg/dL	0.3 13.6 98 28	Alpha 1 & 2 Beta 1 & 2 Gamma 1 Hormone Profile	g/dL g/dL N/A	1.2 0.3 Not Detecte
LDL Cholesterol HDL Cholesterol Creatinine Glucose IgG (ELISA) Phosphorus Patassium	mg/dL mg/dL mg/dL mg/dL µg/mL mg/dL mg/dL	19 9 2.7 113 194 10.3	Cortisol Estradiol Insulin Progesterone T3 Baseline T4 Baseline	µg/dL pg/mL µIU/mL ng/mL ng /mL ug/dL ng/mL	0.274 50.2 4.94 <0.05 12.5 0.281

VWR International LLC, Radnor Corporate Center, Building One, Suite 200, 100 Matsonford Road Radnor, PA 19087 VWR International byba/sprl, Haasrode Research Park Zone 2020, Geldenaaksebaan 464, 3001 Leuven, Belgium http://www.vwr.com/seradigm Technical phone: 866-508-7315 Technical email: SeradigmTechnicalSupport@vwr.com Lot 083B16 • Page 1 of 2

Testosterone

ng/mL

<0.01

>10.0

135



Certificate of Analysis and Origin



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 United States origin and have passed ante- and post-mortem inspection. All harvest facilities are USDA inspected and approved and located within the continental United States of America. All collection and processing activities are performed under the strict guidance of standard operating procedures. This product meets European Union requirements for production of technical blood products.

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

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 (<u>www.serumindustry.org</u>).

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



BOVINE SPONGIFORM ENCEPHALOPATHY (BSE) STATEMENT

Seradigm certifies that this product does not contain, and is not derived from, specified risk material as defined in Commission Decision 97/534/EC. The Commission Decision defines specified risk material of bovine origin as: the skull, including the brain and eyes, tonsils and spinal cord of bovine animals aged over 12 months.

Bovine spongiform encephalopathy cannot be removed using collection or filtration methods. No assays are available to detect prions in blood products, there preventing any inactivation processes from being performed that would guarantee bovine blood to be prion-free. The European Pharmacopeia (Ph.Eur. 2002, 5.2.8 Minimising the risk of transmitting animal spongiform encephalopathy agents via medicinal products) and the World Health Organization both assign fetal bovine serum a Category iV "no detectable infectivity" classification, a designation of least amount of risk.

OIE Resolution No. 20, issued May 2013, upgraded the United States' risk status classification for BSE to "negligible risk". Material from the US is now Category A (formerly GBR I) which is the lowest risk category for BSE.

Signed on behalf of VWR:

John Manley Quality Manager