

## Certificate of Analysis

## **Premium Fetal Bovine Serum**

Meets USDA requirements Performance, Mycoplasma, and Virus And Endotoxin Tested

Storage Temperature:  $-20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Country of Origin: USA

Lot Number: 911879886

Catalog Number: FBS001

Expiration Date: 05/2023

Origin: This material is sourced from government approved abattoirs. The animals received ante and postmortem veterinary inspection and were deemed fit for human consumption. For in vitro research use only. Sterile filtered (triple  $0.1\mu m$ ).

TEST	SPECIFICATIONS	RESULT	RESULT	
Albumin	≤4.5 g/dL	2.3 g/dL		
ALT	As Reported	5 IU/L		
AST	As Reported	38 IU/L		
Bilirubin	As Reported	0.2 mg/dL		
Calcium	As Reported	13.1 mg/dL		
Chloride	As Reported	96 mEq/L		
Cholesterol	As Reported	<50 mg/dL		
Creatinine	As Reported	2.8mg/dL		
Globulin	As Reported	2.2 g/dL		
Glucose	As Reported	53 mg/dL		
Hemoglobin (Fleming and Wolf)	<25 mg/dL	15 mg/dL		
Immunoglobulin G (lgG ) (ELISA)	As Reported	102μg/mL		
Osmolality (USP <785>)	280-350 mosm/kg	304 mOsm/kg		
pH (USP <791>)	6.5-8.5	7.1		
Phosphorus	As Reported	8.3 g/dL		
Potassium	As Reported	15.3 mEq/L		
Sodium	As Reported	135 mEq/L		
Total Protein	3.0-4.5g/dL	3.7g/dL		
Urea	As Reported	14 mg/dL		

Cell Growth Performance Testing Low Density Lipoprotein Cholesterol (LDL) Passed >75% to Control As Reported Pass 3.0 mg/dl

Triglycerides	As Reported	49mg/dl
Uric Acid	As Reported	1.2 mg/dl
Electrophoretic Profile typical or Normal or Cellulose Acetate Electrophoresis	Representative of Fetal Bovine Serum	Normal
Alpha1,2 / 1&2	As Reported	1.2g/dl
Beta 1,2 / 1 &2	As Reported	0.2 g/dl
Gamma 1,2 / 1 &2	As Reported	0.1 g/dl
Cortisol	As Reported	0.211 μg/dL
Estradiol	As Reported	26.0pg/ml
Insulin	As Reported	6.12 μIU/mL
Progesterone	As Reported	<0.5 ng/ml
Testosterone	As Reported	<0.01 ng/ml
Т3	As Reported	71.3ng/dl
T4	As Reported	15.0 μ/dL

SPECIFICATION	RESULT
≤5 EU/mL	≤1.0 EU/mL
Not Detected	Not Detected
Not Detected	Not Detected
No Growth	No Growth
No Growth	No Growth
No Growth	No Growth
Amber or caramel colored	
frozen Liquid	Pass
	≤ 5 EU/mL  Not Detected  Not Detected  No Growth  No Growth  No Growth  Amber or caramel colored

## **Virus Screening**

(9CFRPart 113.53 c [113.46, 113.47])

Blue Tongue	9CFR113.53	Not Detected	Not Detected
Bovine Adeno 1 & 3	9CFR113.53	Not Detected	Not Detected
Bovine Adeno 5	9CFR113.53	Not Detected	Not Detected
BPV	9CFR113.53	Not Detected	Not Detected
BRSV	9CFR113.53	Not Detected	Not Detected
BVD Cytopathic		Not Detected	Not Detected
BVD Non-Cytopathic	9CFR113.53	Not Detected	Not Detected
Cytopathic (IBR)	9CFR113.53	Not Detected	Not Detected
Hemadsorbing (P13)	9CFR113.53	Not Detected	Not Detected
Rabies	9CFR113.53		Not Detected
	9CFR113.53	Not Detected	Not Detected
REO virus Proteins/ Proteins/ another Gamma-	9CFR113.53	Not Detected	Not Detected
glutamyl transferase	As reported		5 IU/L
BVDV Serum Neutralization (Alpha)	on		
BVDV Antibody Type 1	As Repor	ted	10 <sup>2.45</sup> TCID50/mL
BVDV Antibody Type 2	As Repor	ted	10 <sup>2.45</sup> TCID50/mL

## STATEMENT OF ORIGIN

Raw serum used in the manufacture of this product was obtained from approved suppliers collecting from abattoirs in the United States from traceable animals originating from the United States. Full health, traceability, and required regulatory documentation are maintained under our quality systems. The serum was processed, filtered, and finished in the United States. BSE/TSE STATEMENT: The United States of America is recognized as having negligible BSE/TSE risk by the World Organization for Animal Health (OIE).