

# Certificate of Analysis

## U.S. Origin Fetal Bovine Serum

Catalog Number  
 US-FBS-100 100mL  
 US-FBS-500 500mL  
 Lot Number SDG131  
 Origin: United States

Date of Manufacture: December 2008

Triple 0.1 µm Filtered  
 Current USP Sterility Tested  
 Mycoplasma and Virus Tested  
 Low Endotoxin and Hemoglobin  
 Expiration Date: December 2013

### Test

Endotoxin (Limulus Amebocyte Lysate-Gel Clot)  
 Hemoglobin (Spectrophotometric)  
 Sterility Testing (current USP) for  
   Bacteria and Fungi  
 pH  
 Osmolality (mOsm/KgH<sub>2</sub>O)

### Virus Testing (Modified 9CFR113.53)

Bovine Viral Diarrhea Virus  
   Type 1 BVD, Cytopathic BVD<sup>1</sup>  
   Type 2 BVD, Non-Cytopathic BVD  
 Cytopathogenic Agents (IBR)  
 Hemadsorbing Agents (PI3)

### Antibody Serum Neutralization

BVD  
 IBR  
 PI3

Mycoplasma, Large Volume, Direct Culture  
 Tetracycline

### Cell Culture Assay

Cell Culture Assay

Date: May 14, 2007

### Result

< 0.315 EU/mL  
 9.7 mg/dL

Negative for Growth  
 7.3  
 294

Not Detected  
 Tested  
 None Detected  
 None Detected

1:<4  
 1:<4  
 1:<4

None Detected  
 < 0.5 ug/ml

Pass

<sup>1</sup> Type 1 Cytopathic BVD will cause damage to cells. Use only FBS found free of this biotype.

Catalog Number: US-FBS-500 Lot Number: SDG131

## Biochemical Analysis

Test	Result
Alkaline Phosphatase	200 IU/L
ALT (SGPT)	8 IU/L
AST (SGOT)	47 IU/L
GGT	5 IU/L
Total Bilirubin	0.2 mg/dL
BUN	15 mg/dL
Creatinine	2.7 mg/dL
Serum Iron	192 µg/dL
Calcium	13.3 mg/dL
Phosphorus	9.9 mg/dL
Chloride	100 mEq/L
Sodium	137 mEq/L
Cholesterol	32 mg/dL
Glucose	106 mg/dL
Magnesium	3.1 mg/dL

## Electrophoretic Profile

Total Protein	3.4 g/dL
Albumin	2.2 g/dL
Alpha 1,2	1.3 g/dL
Beta	0.2 g/dL
Gamma	0.0 undetected
Gamma Globulin (ELISA)	107 µg/mL

## Hormone Panel

Testosterone	0.14 ng/mL
Insulin	7.53 µIU/mL
Estrogen	39.03 pg/mL
Cortisol	0.2 µg/dL
T3	85 ng/dL
T4	11.3 µg/dL