

Certificate of Analysis

Updated November 13, 2018

Product:

GemCell™ Fetal Bovine Serum

Triple 0.1µm sterile-filtered

Catalog #: 100-500 Lot #: A83F82I

Origin: United States (100%)

Manufacture Date: Jan 2017 Expiration Date: Jan 2022

Expiration Date: Jun 2022			/ E- E-
T EST	M ETHODOLOGY	SPECIFICATION	RESULTS
Biological Testing		JANS OF JEEP TO SERVICE OF THE SERVI	I ZIII AAY
Endotoxin	USP<85>	<10.0 EU/mL	<0.1 EU/mL
Hemoglobin	Fleming, AF and Woolf, AJ (1965)	<20 mg/dL	17.4 mg/dL
Microbiological Testing			
Sterility	USP<71>	Not Detected	Not Detected
Bacteria		Not Detected	Not Detected
Fungi		Not Detected	Not Detected
Mycoplasma	Barile, MF and Kern, J (1971)	Not Detected	Not Detected
Viral Testing	9 CFR 113.53c [113.46, 113.47]		
Cytopathic Agents		Not Detected	Not Detected
Hemadsorbing Agents		Not Detected	Not Detected
Bovine Viral Diarrhea Ab Titer			
Туре І			1:2
Type II			1:1
Extraneous Viruses (FAb)			
Bluetongue Virus		Not Detected	Not Detected
Bovine Adenovirus		Not Detected	Not Detected
Bovine Parvovirus		Not Detected	Not Detected
Bovine Viral Diarrhea (cytopathic)		Not Detected	Not Detected
Bovine Syncytial Virus		Not Detected	Not Detected
Bovine Rabies Virus		Not Detected	Not Detected
Reovirus		Not Detected	Not Detected
Physical Testing			
Electrophoretic Pattern	Cellulose Acetate	Normal	Normal
Osmolality	USP<785>	260-350 m0sm/kg	312 m0sm/kg
pH @ RT	USP<791>	6.5 - 8.5	7.02



Biochemical Testing

Product:

GemCell™ Fetal Bovine Serum

Triple 0.1µm sterile-filtered

Catalog #: 100-500 Lot #: A83F82I

Origin: United States (100%)

Manufacture Date: Jan 2017 Expiration Date: Jan 2022

TEST	M ETHODOLOGY	SPECIFICATION	RESULTS
Albumin			1.9 g/dL
Alkaline Phosphatase			230 U/L
ALT (SGPT)			7 U/L
AST (SGOT)			53 U/L
Bilirubin, Total			0.3 mg/dL
BUN			14 mg/dL
Calcium			3.25 mM
Chloride			96 mM
Cholesterol			39 mg/dL
Cortisol			5.52 nM
Creatinine			2.4 mg/dL
Estrogen			O pM
Glucose			5.72 mM
IgG	ELISA		0.09 mg/mL
Insulin			50.63 pM
Iron, Serum			170 ug/dL
Phosphorus			3.00 mM
Potassium			>10 mM
Progesterone			<0.1 nM
Protein, Total	Biuret	2.5-6.0 g/dL	3.4 g/dL
Sodium			132 mM
Testosterone			<0.01 nM
Т3			2.0 nM
T4			115.8 nM
Triglycerides			70 mg/dL
Tetracycline			<1 ng/mL
Uric Acid			2.4 mg/dL

Results shown were obtained by carefully performed methods believed to be reliable. However, since some results may vary by methodology, it is suggested that tests for which results are particularly critical be repeated by the end user.

Our fetal bovine serum meets all USDA requirements and has passed ante- and post-mortem inspection by a licensed veterinarian. It is collected in countries recognized as being free of foot-and-mouth disease and rinderpest. The origin of all fetal bovine serum is traceable by lot number, date and country of collection.

Precipitates may develop in this product upon freezing and/or thawing; this occurrence does not impact culture performance.

Created by/date

Verified by/date