

Certificate of Analysis

Created April 23, 2014

Product: BenchMark™ Fetal Bovine Serum

Triple 0.1µm sterile-filtered

Catalog #: 100-106 Lot #: A22E00F Origin: El Salvador

Manufacture Date: Feb 2014 Expiration Date: Feb 2019

Test	METHODOLOGY	SPECIFICATION	RESULTS
Biological Testing			
Endotoxin	USP<85>	<10.0 EU/mL	<0.25 EU/mL
Hemoglobin	Fleming, AF and Woolf, AJ (1965)	<20.0 mg/dL	12.64 mg/dL
Microbiological Testing			
Sterility	USP<71>		
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			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 (cytop	Bovine Viral Diarrhea (cytopathic)		Not Detected
Bovine Viral Diarrhea (Non-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	313 m0sm/kg
pH @ RT	USP<791>	6.5 - 8.5	7.64



Biochemical Testing

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Теѕт	Метнорогоду	SPECIFICATION	RESULTS
Albumin			2.2 g/dL
Alkaline Phosphatase			283.0 U/L
ALT (SGPT)			4.0 U/L
AST (SGOT)			27.0 U/L
Bilirubin, Total			0.2 mg/dL
BUN			18 mg/dl
Calcium			3.4 mM
Chloride			102 mM
Cholesterol			35 mg/dL
Cortisol			<5.52 nM
Creatinine			2.7 mg/dL
Estrogen			88.29 pM
Glucose			2.94 mM
IgG	ELISA		0.156 mg/mL
Insulin			39.93 pM
Iron, Serum			170 ug/dL
Phosphorus			2.81 mM
Potassium			11.6 mM
Progesterone			<0.159 nM
Protein, Total	Biuret	2.5-6.0 g/dL	3.6 g/dL
Sodium			139 mM
Testosterone			0.416 nM
T3			0.924 nM
T4			201.8 nM
Triglycerides			56 mg/dL
Tetracycline			<4 ng/mL
Uric Acid			1.5 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.

OHALITY ASSURANCE