

Certificate of Analysis

Updated January 22, 2020

Product:

BenchMark™ Fetal Bovine Serum Heat Inactivated*

Triple 0.1µm sterile-filtered

Catalog #: 100-106 Lot #: A65E00F Origin: Costa Rica

Manufacture Date: Oct 2014 Expiration Date: Oct 2019

T EST	M ETHODOLOGY	SPECIFICATIONS	RESULTS	New Results
Biological Testing				
Endotoxin	USP<85>	<10.0 EU/mL	<0.500 EU/ml	2.22 EU/mL
Hemoglobin	Fleming, AF and Woolf, AJ (1965)	<20.0 mg/dL	18.33 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 (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	319 mOsm/kg	348 m0sm/k
pH @ RT	USP<791>	6.5 - 8.5	7.08	7.31



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Albumin			2.4	0.6	g/dL
Alkaline Phosphatase			298.0	2	U/L
ALT (SGPT)			7.0	0	U/L
AST (SGOT)			43.0	5	U/L
Bilirubin, Total			0.3	0.0	mg/dL
BUN			19.0	6	mg/dL
Calcium			3.5	0.93	mM
Chloride			102.0	<50	mM
Cholesterol			38.0	6	mg/dL
Cortisol			<5.52		nM
Creatinine			2.8	0.6	mg/dL
Estrogen			103.52		pM——
Glucose			3.33	0.72	mM
IgG	ELISA		0.096		mg/mL
Insulin			47.1		рМ
Iron, Serum			174	48	ug/dL
Phosphorus			3.07	0.97	mM
Potassium			10.6	3.5	mM
Progesterone			<0.159		nM
Protein, Total	Biuret	2.5-6.0 g/dL	3.6	0.9	g/dL
Sodium			139.0	<50	mM
Testosterone			0.59		nM
Т3			0.94		nM
T4			106.8		nM
Triglycerides			62.0	20	mg/dL
Tetracycline			<4		µg/mL
Uric Acid			1.4	0.5	mg/dL

^{*}Results shown were obtained by carefully performed methods believed to be reliable prior to heat inactivation. 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