

## **Certificate of Analysis**

Created July 27, 2018

**Product:** 

## BenchMark™ Fetal Bovine Serum

Triple 0.1µm sterile-filtered

Catalog #: 100-106 Lot #: A42G00J

Origin: El Salvador (100%)

Manufacture Date: May 2018 Expiration Date: May 2023

Test	<b>M</b> ETHODOLOGY	SPECIFICATION	RESULTS	
Biological Testing				
Endotoxin	USP<85>	<10.0 EU/mL	<0.500 EU/mL	
Hemoglobin	Fleming, AF and Woolf, AJ (1965)	<20.0 mg/dL	Pending	
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 Tite	r			
Type i		Test and Report	1:1	
Type II		Test and Report	1:1	
Extraneous Viruses (FAb)				
Bluetongue Virus		Not Detected Not Detected		
Bovine Adenovirus		Not Detected	Not Detected	
Bovine Parvovirus		Not Detected	ected Not Detected	
Bovine Viral Diarrhea (cytopathic)		Not Detected	Not Detected	
Bovine Viral Diarrhea (non-cytopathic)		Test and Report	Tested	
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	306 mOsm/kg	
pH @ RT	USP<791>	6.5 - 8.5	7.13	



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<b>T</b> EST	<b>M</b> ETHODOLOGY	SPECIFICATION		RESULTS	
Albumin		Test and Report	2	2.2 g/dl	_
Alkaline Pho	sphatase	Test and Report	2	281 U/L	
ALT (SGPT)		Test and Report	5	U/L	
AST (SGOT)		Test and Report	2	27 U/L	
GGT		<10 U/L	5	U/L	
Bilirubin, Tot	tal	Test and Report	0	).3 mg/	ďL
BUN		Test and Report	1	.6 mg/	'dL
Calcium		Test and Report	3	3.35 mM	
Chloride		Test and Report	9	99 mM	
Cholesterol		Test and Report	3	30 mg/	'dL
Cortisol		Test and Report	<	5.52 nM	
Creatinine		Test and Report	2	2.6 mg/	′dL
Estradiol		Test and Report	8	88.5 pM	
Glucose		Test and Report	3	3.11 mM	
lgG	ELISA	<0.300 mg/mL*	O	).081 mg/	mL
Insulin		Test and Report	1	L38 pM	
Iron, Serum		Test and Report	1	L72 ug/d	dL
Phosphorus		Test and Report	2	2.81 mM	
Potassium		Test and Report	>	10.0 mM	
Progesteron	e	Test and Report	<	<0.159 nM	
Protein, Tota	al Biuret	2.5-6.0 g/dL	3	3.5 g/dl	L
Sodium		Test and Report	1	L38 mM	
Testosterone	e	Test and Report	<	0.03 nM	
Т3		Test and Report	1	L.18 nM	
T4		Test and Report	1	L92 nM	
Triglycerides	6	Test and Report	6	62 mg/	′dL
Tetracycline		<4 ng/mL	P	Pass	
Uric Acid		Test and Report	1	L.6 mg/	′dL

For Cell Culture, further Manufacturing and Research use only. Not for direct Therapeutic use.

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. \*Some geographic regions may test higher than 0.300 mg/mL. If this be the case, refer to GGT results less than 10 U/L to ensure FBS purity.

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