

Certificate of Analysis

Created August 5, 2019

Product:

BenchMark™ Fetal Bovine Serum Heat Inactivated*

Triple 0.1µm sterile-filtered

Catalog #: 100-106 Lot #: A98G00K

Origin: Mexico (100%)

Manufacture Date: Jun 2019 Expiration Date: Jun 2024

Test	M 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	10.3 mg/dL	
Microbiological Testing				
Sterility	USP<71>			
Bacteria	10	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				
Type I		Test and Report	1:4	
Type II		Test and Report	1:4	
Extraneous Viruses (FAb)	· ·			
Bluetongue Virus		Not Detected	Not Detected	
Bovine Adenovirus		Not Detected	Not Detected	
Bovine Parvovirus		Not Detected	Not Detected	
Bovine Viral Diarrhea (cyto	opathic)	Not Detected	Not Detected	
Bovine Viral Diarrhea (nor	n-cytopathic)	Test and Report	Tested	
Bovine Syncytial Virus		Not Detected	Not Detected	
Bovine Rabies Virus		Not Detected	Not Detected	
Reovirus		Not Detected	Not Detected	
		R _ E		
Physical Testing				
Electrophoretic Pattern	Cellulose Acetate	Normal	Normal	
Osmolality	USP<785>	260-350 m0sm/kg	314 mOsm/kg	
pH @ RT	USP<791>	6.5 - 8.5	7.24	



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Tes	ST	M ETHODOLOG	ìΥ	SPECIFICATION		RESU	LTS
Alb	umin			Test and Report		2.3	g/dL
Alka	aline Phosphatase			Test and Report		212	U/L
ALT	(SGPT)			Test and Report		5	U/L
AS1	「(SGOT)			Test and Report		31	U/L
GG [*]	Т			<10 U/L		5	U/L
Bilii	rubin, Total		2	Test and Report		0.3	mg/dL
BU	V			Test and Report		16	mg/dL
Cal	cium			Test and Report		3.23	mM
Chl	oride			Test and Report		102	mM
Cho	olesterol			Test and Report		28	mg/dL
Cor	tisol			Test and Report		9.05	nM
Cre	atinine			Test and Report		2.7	mg/dL
Est	radiol			Test and Report		138	pM
Glu	cose			Test and Report		4.4	mM
IgG		ELISA		<0.300 mg/mL**		0.320	mg/mL
Insi	ulin			Test and Report		38.1	pM 🚌
l r or	n, Serum			Test and Report	€	165	ug/dL
Pho	osphorus			Test and Report		3.0	mM
Pot	assium			Test and Report		>10.0	mM
⇒ Pro	gesterone			Test and Report		<0.19	nM
Pro	tein, Total	Biuret		2.5-6.0 g/dL		3.5	g/dL
Soc	lium			Test and Report	4	134	mM
Tes	tosterone			Test and Report		<0.03	nM
Т3				Test and Report		1.59	nM
T4				Test and Report		160	nM
Trig	lycerides			Test and Report		66	mg/dL
Teti	racycline			<4 ng/mL		Pass	
Urio	Acid .			Test and Report		2.2	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 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.

**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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05 Aug 2019

CREATED BY/ DATE

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