## **CERTIFICATE OF ANALYSIS**

Fetal Bovine Serum, US origin Lot #: B230201

Manf Date: February 2023 Exp Date: February 2028

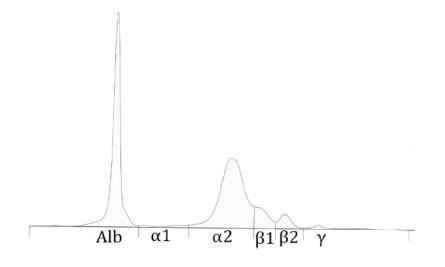
Origin of Raw Material: US Storage: ≤-20°C

Country of final Processing: US Filtration: Triple 0.1µm sterile filtered

Inspection	<u>Specification</u>	<u>Result</u>
Appearance	Clear straw to amber liquid	Pass

<b>Chemical Parameters:</b>	<u>Methodology</u>	<u>Unit</u>	<b>Specification</b>	<u>Result</u>
Alkaline Phosphatase	Chemistry Analyzer	IU/L	Report Result	285
ALT (SGPT)	Chemistry Analyzer	IU/L	Report Result	11
AST (SGOT)	Chemistry Analyzer	IU/L	Report Result	52
Bilirubin	Chemistry Analyzer	mg/dL	Report Result	0.2
Bovine IgG	ELISA	mg/L	Report Result	198.5
Calcium	Chemistry Analyzer	mg/dL	Report Result	13.7
Chloride	Chemistry Analyzer	mEq/L	Report Result	95.0
Cholesterol	Chemistry Analyzer	mg	Report Result	28.0
Creatinine	Chemistry Analyzer	mg/dL	Report Result	2.6
GGT	Chemistry Analyzer	IU/L	Report Result	4.0
Glucose	Chemistry Analyzer	mg/dL	Report Result	77.0
Hemoglobin	USP <90>	mg/dL	≤ 30	11.4
LDH	Chemistry Analyzer	IU/L	Report Result	638.0
Magnesium	Chemistry Analyzer	mEq/L	Report Result	2.6
Osmolality	Osmometer	mOsm/Kg H <sub>2</sub> O	260 – 350	302.0
pH at RT	pH Meter		6.5 – 8.5	7.3
Phosphorus	Chemistry Analyzer	mg/dL	Report Result	9.0
Potassium	Chemistry Analyzer	mEq/L	Report Result	10.5
Serum Iron	Chemistry Analyzer	μg/dL	Report Result	171.0
Sodium	Chemistry Analyzer	mEq/L	Report Result	137.0
Total Protein	Chemistry Analyzer	g/dL	2.5 – 4.0	3.6
Triglyceride	Chemistry Analyzer	mg/dL	Report Result	52.0
Urea Nitrogen (BUN)	Chemistry Analyzer	mg/dL	Report Result	14.0
Uric Acid	Chemistry Analyzer	mg/dL	Report Result	1.9

Microbiological Parameters:	<u>Methodology</u>	<u>Unit</u>	<u>Specification</u>	<u>Result</u>
Endotoxin	LAL	EU/mL	≤10.0	<0.100
Mycoplasma	PCR		Not Detected	Not Detected
Sterility	USP 71		Pass	Pass
Bacteria and Fungi	9CFR 113.26		No Growth	No Growth
Antibiotics/Animycotics:		<u>Unit</u>	Specification	<u>Result</u>
Tetracycline		ng/mL	Report Result	3.00
Viral Testing:	Methodology		Specification	<u>Result</u>
Blue Tongue	9CFR113.53c, 11	3.46, 113.47	Not Detected	Not Detected
Bovine Adeno 1	9CFR113.53c, 11	.3.46, 113.47	Not Detected	Not Detected
Bovine Adeno 5	9CFR113.53c, 11	.3.46, 113.47	Not Detected	Not Detected
BPV	9CFR113.53c, 11	.3.46, 113.47	Not Detected	Not Detected
BRSV	9CFR113.53c, 11	.3.46, 113.47	Not Detected	Not Detected
BVD, Cytopathic	9CFR113.53c, 11	.3.46, 113.47	As Reported	Not Detected
BVD, Non-Cytopathic	9CFR113.53c, 11	3.46, 113.47	As Reported	Tested
CPE - Giemsa (IBR)	9CFR113.53c, 11	.3.46, 113.47	Not Detected	Not Detected
Hemadsorbing (PI3)	9CFR113.53c, 11	.3.46, 113.47	Not Detected	Not Detected
Rabies	9CFR113.53c, 11	.3.46, 113.47	Not Detected	Not Detected
REO Virus	9CFR113.53c, 11	.3.46, 113.47	Not Detected	Not Detected
Protein Electrophoresis:		<u>Unit</u>	Specification	<u>Result</u>
Albumin		g/dL	Report Result	1.5
Alpha 1,2		g/dL	Report Result	0.1, 1.5
Beta		g/dL	Report Result	0.5
Gamma		g/dL	Report Result	0.1
Profile Electrophoresis				



<b>Horomone Panel Tests:</b>	<u>Unit</u>	<b>Specification</b>	<u>Result</u>
Insulin	ulU/mL	Report Result	10.8
Progesterone	ng/mL	Report Result	<0.06
Т3	ng/dL	Report Result	92.9
T4	μg/dL	Report Result	11.5
Testosterone	ng/mL	Report Result	0.01
Biological Performance Testing:	<u>Unit</u>	<u>Specification</u>	<u>Result</u>
Cell Type: CHO K1 Day 3	%	For information	119.9
Cell Type: MRC-5 Day 5	%	For information	89.4
Cell Type: SP2/0-Ag14 Day 3	%	For information	145
Relative Colony Forming Efficiency	%	For information	106.4
Absolute Colony Forming Efficiency	%	For information	85.5
Relative Cloning Efficiency	%	For information	123.9
Absolute Cloning Efficiency	%	For information	59.4

## THIS PRODUCT IS NOT INTENDED FOR HUMAN OR THERAPEUTIC USE

The material used in this product was collected in the United States. The animals received ante and post mortem veterinary inspection.

**CAUTION**: This material is intended for further manufacturing use.

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