

# CERTIFICATE OF ANALYSIS

## Premium Fetal Bovine Serum

<b>Batch/Lot No:</b>	218H19	<b>Expiration Date:</b>	August 2024
<b>Catalog No:</b>	FBS002	<b>Storage:</b>	≤ -10°C
<b>Country of Raw Material Origin:</b>	Honduras	<b>Appearance:</b>	Clear straw to amber liquid
<b>Country of Final Manufacturing:</b>	United States	<b>Filtration:</b>	Triple 0.1 µm membrane filtered
<b>Date of Manufacture:</b>	August 2020		

### Chemical Parameters

Test	Methodology	Unit of Measure	Specification	Results
Alkaline Phosphatase	Chemistry Analyzer	IU/L	As Reported	374
ALT (SGPT)	Chemistry Analyzer	IU/L	As Reported	8
AST (SGOT)	Chemistry Analyzer	IU/L	As Reported	46
Bilirubin	Chemistry Analyzer	mg/dL	As Reported	0.11
Calcium	Chemistry Analyzer	mg/dL	As Reported	14.0
Cholesterol	Chemistry Analyzer	mg/dL	As Reported	36
Chloride	Chemistry Analyzer	mEq/L	As Reported	101
Creatinine	Chemistry Analyzer	mg/dL	As Reported	2.7
GGT	Chemistry Analyzer	IU/L	As Reported	7
Glucose	Chemistry Analyzer	mg/dL	As Reported	88
Hemoglobin	USP <90>	mg/dL	≤ 20	12.61
IgG	ELISA	mg/L	As Reported	151.10
Iron	Chemistry Analyzer	µg/dL	As Reported	156
LDH	Chemistry Analyzer	IU/L	As Reported	590
Osmolality	Osmometer	mOsm/kg H <sub>2</sub> O	260-340	310.0
pH	pH Meter		7.00-8.00	7.11
Phosphorus	Chemistry Analyzer	mg/dL	As Reported	9.9
Potassium	Chemistry Analyzer	mEq/L	As Reported	12.6
Sodium	Chemistry Analyzer	mEq/L	As Reported	135
Total Protein	Chemistry Analyzer	g/dL	3.0-4.5	3.57
Triglyceride	Chemistry Analyzer	mg/dL	As Reported	76
Urea	Chemistry Analyzer	mg/dL	As Reported	43
Uric Acid	Chemistry Analyzer	mg/dL	As Reported	2.3

### Microbiological Parameters

Test	Methodology	Unit of Measure	Specification	Results
Endotoxin	LAL	EU/mL	≤ 10	0.481
Mycoplasma	Culture on Sensitive Media		Not Detected	Not Detected
Sterility				
Bacteria	9CFR 113.26		No Growth	No Growth
Fungi	9CFR 113.26		No Growth	No Growth

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### Viral Testing

Test	Methodology	Specification	Results
Blue Tongue	9CFR 113.53	Not Detected	Not Detected
Bovine Adeno 1	9CFR 113.53	Not Detected	Not Detected
Bovine Adeno 5	9CFR 113.53	Not Detected	Not Detected
BPV	9CFR 113.53	Not Detected	Not Detected
BRSV	9CFR 113.53	Not Detected	Not Detected
BVD	9CFR 113.53	As Reported	Not Detected
Cytopathic (IBR)	9CFR 113.53	Not Detected	Not Detected
Hemadsorbing (PI3)	9CFR 113.53	Not Detected	Not Detected
Rabies	9CFR 113.53	Not Detected	Not Detected
REO Virus	9CFR 113.53	Not Detected	Not Detected

### Protein Electrophoresis

Test	Unit of Measure	Specification	Results
Albumin	g/dL	As Reported	1.69
Alpha Globulins	g/dL	As Reported	1.69
Beta Globulins	g/dL	As Reported	0.19
Gamma Globulins	g/dL	As Reported	0.00

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### Biological Performance

Test	Unit of Measure	Specification	Results
Cell Line: L929-3rd day	%	For information	92
Cell Line: L929-6th day	%	For information	125
Cell Line: SP2-3rd day	%	For information	81
Cell Line: SP2-6th day	%	For information	108
Cell Line: HELA-3rd day	%	For information	125
Cell Line: HELA-6th day	%	For information	117
Cell Line: MRC5-3rd day	%	For information	111
Cell Line: MRC5-6th day	%	For information	107
Plating Efficiency-cells implanted		500	500
Plating Efficiency-# of colonies		For information	379
Plating Efficiency- %PE absolut	%	For information	76
Plating Efficiency- %PE relative	%	For information	98
Cloning Efficiency-cells implanted per well		1	1
Cloning Efficiency-# of colonies		For information	51
Cloning Efficiency- %CE absolut	%	For information	53
Cloning Efficiency- %CE relative	%	For information	95

**Test results reviewed and approved by\***

  
 August 3, 2020  
 Approved by/Date

  
 August 3, 2020  
 Verify by/Date

*\* Test results for this product may have been obtained from third-party certified testing facilities. Results are believed to be accurate but have not been verified by Neuromics. Neuromics relies on the integrity of third-party testing facilities and conducts periodic audits of those facilities. Such audits provided Neuromics with sufficient confidence in the facilities' level of compliance*