

CERTIFICATE OF ANALYSIS

Standard Fetal Bovine Serum

Batch/Lot No:	N20P41 (Formerly 042P20)	Expiration Date:	February 2025
Catalog No:	FBS004	Storage:	≤ -10°C
Country of Raw Material Origin:	Panama	Appearance:	Clear straw to amber liquid
Country of Final Manufacturing:	United States	Filtration:	Triple 0.1 μm membrane filtered
Date of Manufacture:	February 2020		

Chemical Parameters

Test	Methodology	Unit of Measure	Specification	Results
Alkaline Phosphatase	Chemistry Analyzer	IU/L	As Reported	363
ALT (SGPT)	Chemistry Analyzer	IU/L	As Reported	8
AST (SGOT)	Chemistry Analyzer	IU/L	As Reported	25
Bilirubin	Chemistry Analyzer	mg/dL	As Reported	0.15
Calcium	Chemistry Analyzer	mg/dL	As Reported	14.0
Cholesterol	Chemistry Analyzer	mg/dL	As Reported	35
Chloride	Chemistry Analyzer	mEq/L	As Reported	104
Creatinine	Chemistry Analyzer	mg/dL	As Reported	2.9
GGT	Chemistry Analyzer	IU/L	As Reported	6
Glucose	Chemistry Analyzer	mg/dL	As Reported	54
Hemoglobin	USP <90>	mg/dL	≤ 20	14.56
IgG	ELISA	mg/mL	As Reported	154.30
Iron	Chemistry Analyzer	μg/dL	As Reported	154
LDH	Chemistry Analyzer	IU/L	As Reported	545
Osmolality	Osmometer	mOsm/kg H ₂ O	260-340	309.0
pH	pH Meter		7.00-8.00	7.41
Phosphorus	Chemistry Analyzer	mg/dL	As Reported	8.3
Potassium	Chemistry Analyzer	mEq/L	As Reported	11.1
Sodium	Chemistry Analyzer	mEq/L	As Reported	138
Total Protein	Chemistry Analyzer	g/dL	3.0-4.5	3.75
Triglyceride	Chemistry Analyzer	mg/dL	As Reported	57
Urea	Chemistry Analyzer	mg/dL	As Reported	40
Uric Acid	Chemistry Analyzer	mg/dL	As Reported	13

Microbiological Parameters

Test	Methodology	Unit of Measure	Specification	Results
Endotoxin	LAL	EU/mL	≤ 30	26.26
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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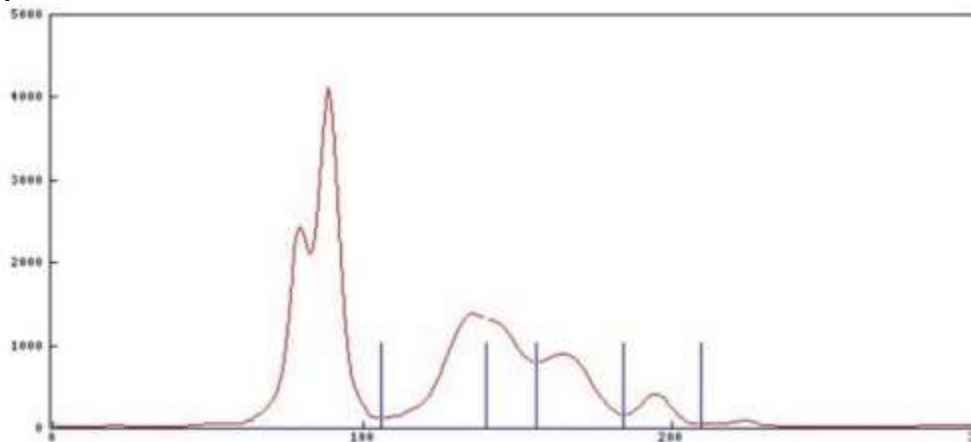
Viral Testing

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	1.81
Alpha Globulins	g/dL	As Reported	1.21
Beta Globulins	g/dL	As Reported	0.68
Gamma Globulins	g/dL	As Reported	0.05

Profile Electrophoresis



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Antibiotics/Antimycotics

Test	Unit of Measure	Specification	Results
Chlortetracycline	mg/mL	As Reported	Not Detected
Doxicycline	mg/mL	As Reported	Not Detected
Oxytetracycline	mg/mL	As Reported	Not Detected
Tetracycline	mg/mL	As Reported	Not Detected


Biological Performance

Test	Unit of Measure	Specification	Results
Cell Line: L929-3rd day	%	For Information	97
Cell Line: L929-6th day	%	For Information	107
Cell Line: SP2-3rd day	%	For Information	85
Cell Line: SP2-6th day	%	For Information	125
Cell Line: HELA-3rd day	%	For Information	83
Cell Line: HELA-6th day	%	For Information	101
Cell Line: MRC5-3rd day	%	For Information	105
Cell Line: MRC5-6th day	%	For Information	77
Plating Efficiency-cells implanted		500	500
Plating Efficiency-# of colonies		For Information	298
Plating Efficiency-%PE Absolut	%	For Information	60
Plating Efficiency-%PE Relative	%	For Information	111
Cloning Efficiency-Cells Implanted per well		1	1
Cloning Efficiency-# of Colonies		For Information	24
Cloning Efficiency-%CE Absolut	%	For Information	25
Cloning Efficiency-%CE Relative	%	For Information	35

Test results reviewed and approved by*



 Approved by/Date April 4, 2020



 Verify by/Date August 27, 2020

** 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*