

Product: **GemChoice™ Fetal Bovine Serum**
 Triple 0.1µm sterile-filtered

Catalog #: 100-123

Lot #: A23H102K

Origin: Uruguay (100%)

Manufacture Date: Jun 2019

Expiration Date: Jun 2024

<i>TEST</i>	<i>METHODOLOGY</i>	<i>SPECIFICATION</i>	<i>RESULTS</i>
Biological Testing			
Endotoxin		<30 EU/ mL	< 0.2 EU/mL
Hemoglobin		<30 mg/dL	9.9 mg/dL
Microbiological Testing			
Sterility			
Bacteria		Sterile	Sterile
Fungi		Sterile	Sterile
Mycoplasma		Negative	Negative
Viral Testing			
Bovine Viral Diarrhea		Tested	Tested
Infectious Bovine Rhinotracheitis (IBR)		Not Detected	Not Detected
PRAINFLENZA 3 Virus (PI3)		Not Detected	Not Detected
Physical Testing			
Osmolality		275-345 mOsm/kg	304 mOsm/kg
pH @ RT		6.8 - 7.8	7.4

Product: **GemChoice™ Fetal Bovine Serum**
 Triple 0.1µm sterile-filtered

Catalog #: 100-123

Lot #: A23H102K

Origin: Uruguay (100%)

Manufacture Date: Jun 2019

Expiration Date: Jun 2024

TEST	METHODOLOGY	SPECIFICATION	RESULTS
Albumin		Test and Report	1.5 g/dL
Alpha Globulins		Test and Report	1.3 g/dL
Alkaline Phosphatase		Test and Report	276 IU/L
ALT (SGPT)		Test and Report	6 IU/L
AST (SGOT)		Test and Report	32 IU/L
GGT		<10 IU/L	6 IU/L
Beta Globulins		Test and Report	8.4 g/L
Bilirubin, Total		Test and Report	<0.1 mg/dL
Calcium		Test and Report	13.8 mg/dL
Chloride		Test and Report	99 mM/L
Cholesterol		Test and Report	30 mg/dL
Creatinine		Test and Report	3.0 mg/dL
Gamma globulins		Test and Report	0.8 g/L
Glucose		Test and Report	111 mg/dL
IgG	ELISA	<0.500 mg/mL*	0.389 mg/mL
Iron, Serum		Test and Report	200 ug/dL
LDH		Test and Report	587 IU/L
Phosphorus		Test and Report	9.9 mg/dL
Potassium		Test and Report	11.4 mM/L
Protein, Total		3.0 - 4.5 g/dL	3.7 g/dL
Sodium		Test and Report	136 mM/L
Triglycerides		Test and Report	58 mg/dL
Urea		Test and Report	38 mg/dL
Uric Acid		Test and Report	3.4 mg/dL
Cell Line L929 6 th Day		Test and Report	115 %
Cell Line SP2 6 th		Test and Report	125 %
Cell Line HELA 6 th Day		Test and Report	95 %
Cell Line MRC5 6 th Day		Test and Report	93 %

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.

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 0.500 mg/mL. If this be the case, refer to GGT results less than 10 U/L to ensure FBS purity.*

Open 15 NOV 2019

CREATED BY/ DATE

[Signature] 15 NOV 2019

VERIFIED BY/ DATE