

## Certificate of Analysis

<b>Description</b>	<b>Fetal Bovine Serum, USDA Approved Source</b>	<b>Catalog #:</b>	35-010-CF
		<b>Lot #:</b>	35010162
		<b>Manufacture Date:</b>	March 28, 2018
		<b>Expiration Date:</b>	March 31, 2023
<b>Storage</b>	-25 to -15°C	<b>Country of Raw Material Origin:</b>	Panama
		<b>Country of Manufacture:</b>	USA

**Notes:**

This product was tested in accordance with currently approved Mediatech, Inc. specifications and procedures. Testing procedures are maintained in compliance with the current versions of the USP and/or EP, where applicable.

This material is sourced from government approved abattoirs from the country of Panama. The animals received ante and post mortem veterinary inspection and were deemed fit for human consumption. This material was imported into the United States under a USDA/APHIS issued import permit.

For research and further manufacturing only. Not for use as an excipient. Not for therapeutic or diagnostic use. Not for human or animal consumption. Utilization of this product apart from the labeled intended use may be a violation of local and/or Federal Law.

TEST PARAMETERS	SPECIFICATION	RESULT
Appearance (Visual Inspection)	Amber or caramel colored frozen liquid	Pass
Triple 0.1 Micron-Filtered	As Reported	Triple 0.1 µm Filtered
Sterility (USP <71>)	Not Detected	Not Detected
(EP 2.6.1)	Not Detected	Not Detected
Sterility Assurance Level (SAL)	10 <sup>-3</sup>	10 <sup>-3</sup>
Endotoxin (USP <85>)	≤ 20EU/mL	<0.1 EU/mL
Mycoplasma (Barile, MF and Kern, J (1971))	Not Detected	Not Detected
(Hoechst Fluorochrome Stain)	Not Detected	Not Detected



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pH (USP <791>)	6.8 – 8.4	7.2
Osmolality (USP <785>)	280 – 350 mOsm/kgH <sub>2</sub> O	304 mOsm/kgH <sub>2</sub> O
Performance Testing	Passed > 75% to control	Pass
Virus Screening (9 CFR Part 113.53 c [113.46, 113.47])		
Bluetongue Virus	Not Detected	Not Detected
Bovine Adenovirus 1 & 5	Not Detected	Not Detected
Bovine Parvovirus	Not Detected	Not Detected
Bovine Respiratory Syncytial Virus	Not Detected	Not Detected
Bovine Viral Diarrhea Virus	As Reported	Not Detected
Rabies Virus	Not Detected	Not Detected
Reovirus	Not Detected	Not Detected
Cytopathogenic Agents (e.g. IBR)	Not Detected	Not Detected
Hemadsorbing Agents (e.g. PI3)	Not Detected	Not Detected
Proteins/Other		
Gamma-Glutamyl Transferase (GGT)	As Reported	5 IU/L
Alkaline Phosphatase	As Reported	354 IU/L
Blood Urea Nitrogen (BUN)	As Reported	18 mg/dL
Cholesterol	As Reported	29 mg/dL
Creatinine	As Reported	2.9 mg/dL
Glucose	As Reported	62 mg/dL
Glutamic Oxaloacetic Transaminase (SGOT) (AST)	As Reported	26 IU/L

Glutamic Pyruvic Transaminase (SGPT)(ALT)	As Reported	5 IU/L
Hemoglobin (USP <90> compliant Fleming and Woolf method)	≤ 30 mg/dL	12.4 mg/dL
High Density Lipoprotein Cholesterol (HDL)	As Reported	10 mg/dL
Immunoglobulin (IgG) (ELISA)	As Reported	98.4 µg/mL
Low Density Lipo-Protein Cholesterol (LDL)	As Reported	6 mg/dL
Total Bilirubin	As Reported	0.2 mg/dL
Total Protein (Biuret Method)	3.0 -5.0 g/dL	3.5 g/dL
Triglycerides	As Reported	64 mg/dL
Uric Acid	As Reported	1.6 mg/dL
Electrophoretic Profile (Cellulose Acetate Electrophoresis)	Typical OR Normal OR Representative of Fetal Bovine Serum	Normal
Albumin	As Reported	2.1 g/dL
Alpha – 1, 2	Report as Alpha 1,2 OR Report both Alpha 1 and Alpha 2 when applicable	1.2 g/dL
Beta	As Reported	0.2 g/dL
Gamma	As Reported	0.1 g/dL
Trace Metals		
Calcium	As Reported	13.3 mg/dL
Chloride	As Reported	99 mEq/L
Iron	As Reported	166 µg/dL
Magnesium	As Reported	3.3 mg/dL
Phosphorus	As Reported	8.6 mg/dL
Potassium	As Reported	>10.0 mEq/L
Sodium	As Reported	136 mEq/L

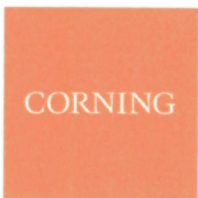
Hormones		
Cortisol	As Reported	<0.2 µg/dL
Estradiol	As Reported	<15 pg/mL
Insulin	As Reported	5.83 µIU/mL
Progesterone	As Reported	<0.2 ng/mL
Testosterone	As Reported	<0.01 ng/mL
T3	As Reported	94.0 ng/dL
T4	As Reported	20.0 µg/dL

For additional information on this Mediatech product, please contact our Technical Services department at (800) 235-5476 or via email at [MTTechServ@corning.com](mailto:MTTechServ@corning.com).

Following signatures indicate the above material has met all quality specifications and has been reviewed by a Quality representative.

Written By/Date: VA 23 MAY 2018

Reviewed By/Date: Yacine P. Lemoine / YP  
23 May 2018



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