CORNING

Certificate of Analysis

Product: Fetal Bovine Serum Description: Regular,

USDA Approved Origin

Catalog Number: 35-010-CF, 35-010-CV **Lot Number:** 35010172

Date of Manufacture: 02 AUG 2019 Date of Expiration: AUG 2024

Country of Raw Material

Origin:

Mexico

Country of Final Processing:

Storage:

United States

-40°C to -10°C

Sterility Assurance 10⁻³ (Triple 0.1 µm

Level: Filtered)

| Test | Method | Specification | Results | Units | |
|--|--------------------------------------|---------------|--------------|--------------------------|--|
| Endotoxin | USP <85> & EP 2.6.14 | ≤ 20 | 8.47 | EU/mL | |
| Hemoglobin | USP <90> | ≤ 30 | 21.57 | mg/dL | |
| Mycoplasma | Barile and Kern & | Not Detected | Not Detected | N/A | |
| мусоріазіна | Hoechst Fluorochrome Stain | | | | |
| Osmolality | USP <785> & EP 2.2.35 | 260 – 350 | 286 | mOsm/kg H ₂ O | |
| pH | USP <791> & EP 2.2.3 | 6.5 - 8.5 | 7.26 | N/A | |
| Sterility (Bacteria & Fungi) | USP <71> & EP 2.6.1 | No Growth | No Growth | N/A | |
| Total Protein | USP <1057> & EP 2.5.33 | 3.0 - 4.5 | 3.6 | g/dL | |
| Gamma-Glutamyl Transferase (GGT) | Chemistry Analyzer | ≤10 | 5 | IU/L | |
| Cell Growth Performance Testing | MTT Assay | Passed | Pass | N/A | |
| Identification (Species ID) | EP 2.7.1 | Bovine | Bovine | N/A | |
| Virus Testing | 9 CFR Part 113.53c | | | | |
| Bluetongue Virus | | Not Detected | Not Detected | N/A | |
| Bovine Adenovirus 1 & 5 | | Not Detected | Not Detected | N/A | |
| Bovine Parvovirus | | Not Detected | Not Detected | N/A | |
| Bovine Respiratory Syncytial Virus | | Not Detected | Not Detected | N/A | |
| Bovine Viral Diarrhea Virus | | As Reported | Not Detected | N/A | |
| Rabies Virus | | Not Detected | Not Detected | N/A | |
| Reovirus | | Not Detected | Not Detected | N/A | |
| Cytopathogenic Agents (IBR) | | Not Detected | Not Detected | N/A | |
| Hemadsorbing Agents (PI3) | | Not Detected | Not Detected | N/A | |
| Biochemical Testing - Proteins & Organic Compounds | | | | | |
| Alkaline Phosphatase | | As Reported | 262 | IU/L | |
| Blood Urea Nitrogen (BUN) | | As Reported | 16 | mg/dL | |
| Cholesterol | | As Reported | 30 | mg/dL | |
| Creatinine | | As Reported | 2.7 | mg/dL | |
| Glucose | | As Reported | 100 | mg/dL | |
| Glutamic Oxaloacetic Transaminase (AST) | | As Reported | 31 | IU/L | |
| Glutamic Pyruvic Transaminase (ALT) | | As Reported | 6 | IU/L | |
| High Density Lipoprotein Cholesterol (HDL) | | As Reported | 11 | mg/dL | |
| Immunoglobulin G (IgG) | ELISA | As Reported | 117.9 | μg/mL | |
| Low Density Lipoprotein Cholesterol (LDL) | | As Reported | 6 | mg/dL | |
| Total Bilirubin | | As Reported | 0.2 | mg/dL | |
| Triglyceride | | As Reported | 67 | mg/dL | |
| Uric Acid | | As Reported | 2.9 | mg/dL | |
| Biochemical Testing - Electrophoretic Profile | Cellulose Acetate Electrophoresis | Normal | Normal | N/A | |
| Albumin | 2.001.001.0010 | As Reported | 2.1 | g/dL | |

| Alpha | As Reported | 1.3 | g/dL |
|------------------------------------|-------------|-------|--------|
| Beta | As Reported | 0.2 | g/dL |
| Gamma | As Reported | 0.0 | g/dL |
| Biochemical Testing - Trace Metals | | | |
| Calcium | As Reported | 13.1 | mg/dL |
| Chloride | As Reported | 98 | mmol/L |
| Iron | As Reported | 167 | μg/dL |
| Magnesium | As Reported | 3.1 | mg/dL |
| Phosphorus | As Reported | 9.3 | mg/dL |
| Potassium | As Reported | >10.0 | mmol/L |
| Sodium | As Reported | 137 | mmol/L |
| Biochemical Testing - Hormones | | | |
| Cortisol | As Reported | 1.10 | μg/dL |
| Estradiol | As Reported | 117 | pg/mL |
| Insulin | As Reported | 6.77 | μIU/mL |
| Progesterone | As Reported | <0.1 | ng/mL |
| Testosterone | As Reported | 0.01 | ng/mL |
| T3 | As Reported | 77.7 | ng/dL |
| T4 | As Reported | 14.0 | μg/dL |

Notes:

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

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

Cell lines used in MTT Assay: 3T3, L929, MDCK, and Vero. Cell lines used in 9CFR Part 113.53c virus testing MDBK and Vero.

For research or further manufacturing uses only. Not for use as an excipient. Not for therapeutic or diagnostic uses. 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.

Origin and BSE/TSE Statements:

The aforementioned lot was manufactured from fetal bovine blood collected from government approved harvest facilities located in Mexico, a country recognized by the United States Department of Agriculture - Animal and Plant Health Inspection Service (USDA-APHIS) and the World Organization for Animal Health (OIE) as having a negligible risk of Bovine Spongiform Encephalopathy (BSE), a bovine-specific Transmissible Spongiform Encephalopathy (TSE). All fetal bovine serum is derived from fetuses collected from healthy bovine cows and heifers that have passed ante and post mortem inspection and were found free of contagious diseases. This material was imported into the United States under a USDA/APHIS issued import permit.

Lot Number: 35010172

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

Written By/Date:

Michael Marce 25 SEP 2019

Reviewed By/Date: Sarah Fogeales 25 SEP 2019



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