CORNING

Certificate of Analysis

Ultra Low IgG Fetal Bovine Serum **Description: Product:** Premium,

United States Origin

Catalog Number: 35-073-CI, 35-073-CV Lot Number: 26120001

Date of Manufacture: 02 OCT 2020 **Date of Expiration:** OCT 2025

Country of Raw Material

Origin:

United States

Country of Final Processing:

Storage:

United States

-40°C to -10°C

10⁻³ (Triple 0.1 μm **Sterility Assurance**

Level: Filtered)

Mycoplasma	Test Endotoxin Hemoglobin	Method USP <85> & EP 2.6.14 USP <90>	Specification ≤ 10 ≤ 25	Results 1.34 5.85	Units EU/mL mg/dL
Osmolality USP <785> & EP 2.2.35 260 - 350 301 mOsm/kg H₂O pH USP <785> & EP 2.2.35 260 - 350 301 mOsm/kg H₂O Sterility (Bacteria & Fungi) USP <791> & EP 2.5.31 No Growth No Growth N/A Total Protein USP <7157 & EP 2.5.33	-		-		-
Sterility (Bacteria & Fungi)	Osmolality	USP <785> & EP 2.2.35	260 – 350	301	mOsm/kg H₂O
Total Protein USP <1057> & EP 2.5.33 3.0 – 4.5 3.2 g/dL Gamma-Glutamyl Transferase (GGT) Chemistry Analyzer ≤ 10 4 IU/L Immunoglobulin G (IgG) ELISA ≤ 5 < 0.0078	•				
Gamma-Glutamyl Transferase (GGT) Chemistry Analyzer ≤ 10 4 IU/L Immunoglobulin G (IgG) ELISA ≤ 5 <0.0078	- ,		-	_	
Immunoglobulin G (IgG) ELISA ≤ 5 <0.0078 µg/mL Cell Growth Performance Testing MTT Assay Passed Passed N/A Identification (Species ID) EP 2.7.1 Bovine Bovine N/A Virus Testing 9 CFR Part 113.53c Ferman Performance Not Detected N/A N/A Bovine Adenovirus 1 & 5 Not Detected Not Detected N/A N/A Bovine Parvovirus Not Detected N/A N/A N/A Bovine Respiratory Syncytial Virus Not Detected N/D Detected N/A Bovine Viral Diarrhea Virus As Reported Not Detected N/A Reovirus Not Detected N/A N/A Revoirus Not Detected N/A N/A Revoirus Not Detected N/A N/A Revoirus Not Detected N/A N/A BVDV Serum Neutralization Alpha Antibody Test As Reported N/A N/A BVDV Antibody Type 1 As Reported 102.30 TCID ₅₀ /mL Bilochemical Testing - Proteins & Organic Compounce As Reported <t< td=""><td></td><td></td><td></td><td></td><td>•</td></t<>					•
Cell Growth Performance Testing MTT Assay Passed Passed N/A Identification (Species ID) EP 2.7.1 Bovine Bovine N/A Virus Testing 9 CFR Part 113.53c Not Detected Not Detected N/A Bovine Adenovirus 1 & 5 Not Detected Not Detected N/A Bovine Parvovirus Not Detected N/A N/A Rovirus Not Detected N/A N/A Rabies Virus Not Detected N/A N/A Reporting Agents (IBR) Not Detected N/A Detected N/A Cytopathogenic Agents (IBR) As Reported Not Detected N/A BVDV Antibody Type 1 As Reported Not Neutralization N/A BVDV Antibody Type 2 Not Detected Not Detected N/A Bloochemical	` , ,				
Identification (Species ID)	()	MTT Assav	Passed	Passed	
Virus Testing 9 CFR Part 113.53c Suetongue Virus Suetongue Virus Not Detected Not Detected Nid De	<u> </u>	-	Bovine	Bovine	N/A
Bluetongue Virus Bovine Adenovirus 1 & 5 Bovine Parvovirus Bovine Respiratory Syncytial Virus Bovine Parvovirus Bovine Parvovirus Bovine Respiratory Syncytial Virus Bovine Viral Diarrhea Virus Bovine Virus Diarrhea Virus Bovine Viral Diarrhea Virus Bovin	· · · /				
Bovine Adenovirus 1 & 5 Bovine Parvovirus Bovine Respiratory Syncytial Virus Bovine Viral Diarrhea Virus Rabies Virus Rabies Virus Reovirus Not Detected Not Detecte	-		Not Detected	Not Detected	N/A
Bovine Respiratory Syncytial Virus Bovine Viral Diarrhea Virus Rabies Virus Rabies Virus Recovirus Recovir	-		Not Detected		N/A
Bovine Respiratory Syncytial Virus Bovine Viral Diarrhea Virus Rabies Virus Rabies Virus Recovirus Recovir	Bovine Parvovirus		Not Detected	Not Detected	N/A
Bovine Viral Diarrhea Virus Rabies Virus Not Detected Not	Bovine Respiratory Syncytial Virus		Not Detected	Not Detected	
Rabies Virus Reovirus Not Detected Not Detec			As Reported	Not Detected	N/A
Cytopathogenic Agents (IBR) Hemadsorbing Agents (PI3) BVDV Serum Neutralization Alpha Antibody Test BVDV Antibody Type 1 BVDV Antibody Type 2 Biochemical Testing - Proteins & Organic Compounds Alkaline Phosphatase Alkaline Phosphatase As Reported Blood Urea Nitrogen (BUN) Creatinine Glucose Glucose Glutamic Oxaloacetic Transaminase (AST) Glutamic Pyruvic Transaminase (ALT) High Density Lipoprotein Cholesterol (LDL) Alpha Antibody Test Alpha Antibody Test As Reported As Reporte	Rabies Virus		· · · · · · · · · · · · · · · · · · ·	Not Detected	N/A
Cytopathogenic Agents (IBR) Hemadsorbing Agents (PI3) BVDV Serum Neutralization Alpha Antibody Test BVDV Antibody Type 1 BVDV Antibody Type 2 Biochemical Testing - Proteins & Organic Compounds Alkaline Phosphatase Blood Urea Nitrogen (BUN) Creatinine Glucose Glucose Glutamic Oxaloacetic Transaminase (AST) Glutamic Pyruvic Transaminase (ALT) High Density Lipoprotein Cholesterol (HDL) Low Density Lipoprotein Cholesterol (LDL) Alpha Antibody Test Alka Reported As Reported Not Detected N/A Not Detected Not Detected N/A Not Detected N/A Not Detected Not Detected Not Detected Not Detected N/A Not Detected Not Detected Not Detected Not Detected N/A Not Detected Not Dete	Reovirus		Not Detected	Not Detected	N/A
Hemadsorbing Agents (PI3) BVDV Serum Neutralization Alpha Antibody Test BVDV Antibody Type 1 BVDV Antibody Type 2 As Reported As	Cytopathogenic Agents (IBR)		Not Detected		N/A
BVDV Antibody Type 1 BVDV Antibody Type 1 BVDV Antibody Type 2 Biochemical Testing - Proteins & Organic Compounds Alkaline Phosphatase Alkaline Phosphatase Blood Urea Nitrogen (BUN) Creatinine Creatinine Glucose Glutamic Oxaloacetic Transaminase (AST) Glutamic Pyruvic Transaminase (ALT) High Density Lipoprotein Cholesterol (LDL) As Reported As Report			Not Detected	Not Detected	N/A
BVDV Antibody Type 1 BVDV Antibody Type 2 Biochemical Testing - Proteins & Organic Compounds Alkaline Phosphatase Alkaline Phosphatase Blood Urea Nitrogen (BUN) Cholesterol Creatinine Glucose Glucose Glutamic Oxaloacetic Transaminase (ALT) High Density Lipoprotein Cholesterol (LDL) As Reported	- , ,	Alpha Antibody Test			
BVDV Antibody Type 2 Biochemical Testing - Proteins & Organic Compounds Alkaline Phosphatase Alkaline Phosphatase As Reported Blood Urea Nitrogen (BUN) As Reported Blucose As Reported As Reported As Reported As Reported Blucose As Reported As Reported Blucose As Reported As Repor	BVDV Antibody Type 1		As Reported	No Neutralization	N/A
Biochemical Testing - Proteins & Organic Compounds Alkaline Phosphatase As Reported Blood Urea Nitrogen (BUN) As Reported As Reported As Reported Creatinine As Reported Creatinine As Reported As Reported As Reported As Reported As Reported Blucose As Reported As Reported As Reported As Reported Blucose As Reported As Reported As Reported Blutamic Oxaloacetic Transaminase (AST) As Reported As Reported As Reported As Reported Blutamic Pyruvic Transaminase (ALT) Blutamic	BVDV Antibody Type 2		As Reported		TCID ₅₀ /mL
Blood Urea Nitrogen (BUN) Cholesterol As Reported As Reported As Reported Creatinine As Reported As Reported As Reported Creatinine As Reported As Reported As Reported Clucose As Reported As Reporte	Biochemical Testing - Proteins & Organic Compour	nds	·		
Blood Urea Nitrogen (BUN) Cholesterol As Reported As Reported As Reported Creatinine As Reported As Reported Creatinine As Reported As Reported Clucose As Reported As Reported As Reported As Reported IU/L Glutamic Oxaloacetic Transaminase (AST) As Reported As Reported As Reported IU/L High Density Lipoprotein Cholesterol (HDL) As Reported As R	Alkaline Phosphatase		As Reported	167	IU/L
CreatinineAs Reported2.3mg/dLGlucoseAs Reported103mg/dLGlutamic Oxaloacetic Transaminase (AST)As Reported41IU/LGlutamic Pyruvic Transaminase (ALT)As Reported5IU/LHigh Density Lipoprotein Cholesterol (HDL)As Reported8mg/dLLow Density Lipoprotein Cholesterol (LDL)As Reported6mg/dL	Blood Urea Nitrogen (BUN)		•	14	mg/dL
Glucose As Reported 103 mg/dL Glutamic Oxaloacetic Transaminase (AST) As Reported 41 IU/L Glutamic Pyruvic Transaminase (ALT) As Reported 5 IU/L High Density Lipoprotein Cholesterol (HDL) As Reported 8 mg/dL Low Density Lipoprotein Cholesterol (LDL) As Reported 6 mg/dL	Cholesterol		As Reported	27	mg/dL
Glucose As Reported 103 mg/dL Glutamic Oxaloacetic Transaminase (AST) As Reported 41 IU/L Glutamic Pyruvic Transaminase (ALT) As Reported 5 IU/L High Density Lipoprotein Cholesterol (HDL) As Reported 8 mg/dL Low Density Lipoprotein Cholesterol (LDL) As Reported 6 mg/dL	Creatinine				-
Glutamic Oxaloacetic Transaminase (AST) Glutamic Pyruvic Transaminase (ALT) High Density Lipoprotein Cholesterol (HDL) Low Density Lipoprotein Cholesterol (LDL) As Reported	Glucose		As Reported		mg/dL
High Density Lipoprotein Cholesterol (HDL) Low Density Lipoprotein Cholesterol (LDL) As Reported 8 mg/dL As Reported 6 mg/dL	Glutamic Oxaloacetic Transaminase (AST)		•		-
High Density Lipoprotein Cholesterol (HDL) Low Density Lipoprotein Cholesterol (LDL) As Reported 8 mg/dL Mg/dL	Glutamic Pyruvic Transaminase (ALT)		As Reported	5	IU/L
	High Density Lipoprotein Cholesterol (HDL)		As Reported	8	mg/dL
	Low Density Lipoprotein Cholesterol (LDL)		As Reported	6	mg/dL
Total Bilirubin As Reported 0.1 mg/dL	Total Bilirubin		As Reported	0.1	mg/dL
Triglyceride As Reported 64 mg/dL	Triglyceride		As Reported	64	-

Uric Acid		As Reported	2.7	mg/dL
Biochemical Testing - Electrophoretic Profile	Cellulose Acetate Electrophoresis	Normal	Normal	N/A
Albumin		As Reported	1.7	g/dL
Alpha 1, 2		As Reported	1.2	g/dL
Beta		As Reported	0.2	g/dL
Gamma		As Reported	0.1	g/dL
Biochemical Testing - Trace Metals				
Calcium		As Reported	12.3	mg/dL
Chloride		As Reported	98	mmol/L
Iron		As Reported	170	μg/dL
Magnesium		As Reported	2.9	mg/dL
Phosphorus		As Reported	10.5	mg/dL
Potassium		As Reported	>10.0	mmol/L
Sodium		As Reported	136	mmol/L
Biochemical Testing - Hormones				
Cortisol		As Reported	0.293	μg/dL
Insulin		As Reported	2.78	μIU/mL
Progesterone		As Reported	<0.1	ng/mL
Testosterone		As Reported	0.01	ng/mL
Т3		As Reported	142	ng/dL
T4		As Reported	13.0	μg/dL

Notes:

For additional information on this Mediatech product, please contact our Technical Services department at (800) 492-1110 or via email at scientificsupport@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.

Product meets European Union requirements for treated technical blood products.

Origin and BSE/TSE Statements:

The aforementioned lot was manufactured from fetal bovine blood collected from government approved harvest facilities located in the United States, 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.

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

Written By/Date:

Michael May 2021 Reviewed By/Date:

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Lot Number: 26120001