



GEMINI
BIO-PRODUCTS

Certificate of Analysis

Revised March 27, 2019

Product: **Human Serum (Normal)**
0.1µm sterile-filtered

Catalog #: 100-110

Lot #: H87W00K

Origin: United States (100%)

Manufacture Date: Jan 2019

Expiration Date: Jan 2024

TEST	METHODOLOGY	SPECIFICATION	RESULTS
Biological Testing			
Endotoxin	LAL	< 10 EU/mL	<0.500 EU/mL
Hemoglobin		<20.0 mg/dL	6.2 mg/dL
Microbiological Testing			
Sterility	USP<71>		
Bacteria		Not Detected	Not Detected
Fungi		Not Detected	Not Detected
Mycoplasma	Barile, MF and Kern, J (1971)	Not Detected	Not Detected
Viral Testing			
	21 CFR 610.40		
HBsAg		Non-Reactive	Non-Reactive
Anti-HCV		Non-Reactive	Non-Reactive
Anti-HIV-1/HIV-2		Non-Reactive	Non-Reactive
Syphilis		Negative	Negative
HBV-NAT		Not Detected	Not Detected
HIV-NAT		Not Detected	Not Detected
HCV-NAT		Not Detected	Not Detected
Physical Testing			
Osmolality	USP<785>	260-350 mOsm/kg	323 mOsm/kg
pH	USP<791>	Report	7.98



Biochemical Testing

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TEST	METHODOLOGY	SPECIFICATION	RESULTS
Albumin		Test and Report	>6.0 g/dL
Bilirubin, Total		Test and Report	0.4 mg/dL
Calcium		Test and Report	>3.75 mM
Chloride		Test and Report	>140 mM
Cholesterol		Test and Report	199 mg/dL
Creatinine		Test and Report	1.42 mg/dL
Glucose		Test and Report	8.60 mM
Phosphorus		Test and Report	1.81 mM
Potassium		Test and Report	6.4 mM
Protein, Total	Biuret	Test and Report	10.8 g/dL
Sodium		Test and Report	>165 mM
Triglycerides		Test and Report	87 mg/dL

All human blood products are collected from stringently screened male donors at FDA-licensed collection centers in the United States. Results shown were obtained by carefully performed methods believed to be reliable. As some results may vary for specific tests depending upon methodology and other variables, it is suggested that tests for which results are particularly important be repeated by the user of this product. Lot specific samples are available at the customer's request and users are encouraged to evaluate the sample prior to purchase. Precipitates may develop in this product upon freezing and/or thawing; this occurrence does not impact culture performance.

CAUTION: For Cell Culture, further Manufacturing and Research use only. Not for direct Therapeutic use. It is the responsibility of the user to undertake verification and testing to determine the suitability of this product's application. The statements herein are offered for informational purposes and are intended to be used solely for your consideration, investigation and verification.

Evelyn D. [Signature] 27 MAR 2019
Created by/ date

[Signature] 27 Mar 2019
Verified by/ date