



ANALYSIS CERTIFICATE

Human Serum

Product ID# 710-027-21

Parameter **Acceptable Limits**

Physical Appearance	Clear, Straw yellow solution
Osmolality*	279-303 mOsm / kg
Hemoglobin	<25 mg / dl
Sterility (USP)	Sterile
Mycoplasma (Bionique – M350)	Negative
Endotoxin (BioWhittaker)	<10 EU / ml

* Calculation: Osmolality = (Na x 2) (Glucose / 18) + (Bun / 2.8)

Chemistry	Normal Range
Glucose	70 – 118 mg / dl
Sodium	135 – 148 mEq / l
Potassium	3.5 – 5.5 mEq / l
Chloride	95 – 110 mEq / l
BUN	5 – 25 mg / dl
Creatinine	0.5 – 1.4 mg / dl
Uric Acid	2.2 – 8.3 mg / dl
Calcium	8.5 – 11.0 mg / dl
Phosphorus	2.2 – 7.0 mg / dl
Total Protein	5.5 – 6.0 g / dl
Albumin	3.0 – 5.5 g / dl
Total Bilirubin	0.0 – 1.5 mg / dl
ALT (SGPT)	0 – 50 IU / l
Alkaline Phos.	63 – 115 IU / l
AST (SGOT)	7 – 45 IU / l
GGT	0 – 60 IU / l
LDH	100 – 250 IU / l
Cholesterol	80 – 200 mg / dl
Triglyceride	30 – 160 mg / dl
Final Filter – 0.1 micron cartridge	

Each donor unit used in the preparation of this material was tested and found negative for HBsAg, HIV-1/2, HCV, HIV-1 Ag or HIV-1-NAT, and RPR by FDA approved methods.