

# CERTIFICATE OF ANALYSIS

Page 1 of 2

## Complement Technology, Inc.

4801 Troup Hwy, Suite 701

Tyler, Texas 75703, USA

Product: **C8-Dpl**

Catalog # **A325** Lot #

Exp. Date:

Description: Complement C8-Depleted Human Serum

<u>Specifications</u>	<u>Limits</u>	<u>Results</u>
PROTEIN CONCENTRATION	$\geq 40$ mg/mL employing an extinction coefficient of $E1\%/280\text{nm} = 10$	60 mg/ml
FILL VOLUME	1.0 – 1.2 mL	1.1 mL
PHYSICAL APPEARANCE	Clear, straw colored	Clear, straw colored
BUFFER	Phosphate Buffered Saline, pH 7.3	Conforms
PRESERVATIVE	None, filtered through a 0.22 $\mu\text{m}$ pore size filter.	None, filtered through a 0.22 $\mu\text{m}$ pore size filter.

### CLASSICAL PATHWAY (CP) ACTIVITY\*

Recommended volume of C8-Dpl serum per assay	$\leq 40$ $\mu\text{L}$	20 $\mu\text{L}$
C8H50 units/mg purified C8 at the recommended input of C8-Dpl	$\geq 70,000$ Units/mg	609,000 Units/mg
Input of purified C8 to yield 1 C8H50	$\leq 14$ ng	1.6 ng
C8H50/mL NHS Complement Std at the recommended input of C8-Dpl	$\geq 5,400$ Units/mL	26,000 Units/mL
Input of C8 in NHS Complement Std to yield 1 C8H50	$\leq 8$ ng	2.1 ng
CP Ratio: $\frac{\text{C8H50/mg Purified C8}}{\text{C8H50/mg C8 in NHS Std}}$	$\geq 0.60$	1.27
Background $A_{412}$ EA blank reading at the recommended input of C8-Dpl	$\leq 0.100$	0.030

### CH50 FUNCTIONAL ACTIVITY UPON RECONSTITUTION\*\*

CH50/mL NHS Std	$\geq 75$ CH50/mL	145 CH50/mL
CH50/mL C8-Dpl reconstituted with 100 $\mu\text{g}$ C8/mL	$\geq 50$ CH50/mL	145 CH50/mL
Ratio: $\frac{\text{CH50/mL C8-Dpl} + \text{C8}}{\text{CH50/mL NHS Std}}$	$\geq 0.60$	1.00

# CERTIFICATE OF ANALYSIS

Page 2 of 2

Complement C8-Depleted Human Serum, Lot # 8 (Continued)

## ALTERNATIVE PATHWAY (AP) ACTIVITY \*\*\*

APH50/mL NHS Std.	$\geq 50$ APH50/mL	167 APH50/mL
Input NHS Std to yield 1 APH50	$\leq 20$ $\mu$ L	6 $\mu$ L
APH50/mL C8-Dpl + C8	$\geq 30$ APH50/mL	160 APH50/mL
Input C8-Dpl + C8 to yield 1 APH50	$\leq 33$ $\mu$ L	6.3 $\mu$ L
AP Ratio: $\frac{\text{APH50/mL C8-Dpl + C8}}{\text{APH50/mL NHS Std}}$	$> 0.60$	0.96

## IMMUNOCHEMISTRY

Ouchterlony	No C8 antigen detectable using various dilutions of goat anti-C8	Conforms
-------------	--	----------

## STARTING MATERIAL: HUMAN SERUM/PLASMA

HBsAg	Negative	Negative
Anti-HBc	Negative	Negative
Anti-HIV 1 and 2 Plus O	Negative	Negative
Anti-HCV	Negative	Negative
Anti-Syphilis	Negative	Negative
HCV by NAT	Negative	Negative
HIV by NAT	Negative	Negative
HTLV 1 and 2	Negative	Negative
West Nile Virus	Negative	Negative
HBV by NAT	Negative	Negative

**SAFETY PRECAUTIONS:** This product is derived from human blood and although it tested negative for HIV antibodies and Hepatitis B and C it should be handled with appropriate precautions including wearing of gloves and safety glasses.

\* One C8H50 unit measured by classical pathway activation is defined as the amount of C8 required to yield 50% lysis of  $3 \times 10^7$  EA when incubated in the presence of the recommended volume of C8-Dpl serum for 30 minutes at 37°C in a total reaction volume of 500  $\mu$ L GVB<sup>++</sup>.

\*\* One CH50 unit is defined as the input of C8-Dpl, reconstituted with C8, or NHS Complement Std. yielding 50% lysis of  $1 \times 10^8$  EA when incubated for 60 minutes at 37°C in a total reaction volume of 1.5 mL GVB<sup>++</sup>.

\*\*\* One unit of alternative pathway activity (APH50) is defined as the input of C8-Dpl, reconstituted with 100 $\mu$ g/ml purified C8, or NHS Complement Standard yielding 50% lysis of  $1.5 \times 10^7$  rabbit erythrocytes (Er) when incubated for 30 minutes at 37°C in a total reaction volume of 100  $\mu$ L GVB<sup>o</sup> containing a final MgEGTA concentration of 5 mM.

**STORE AT -70°C or BELOW.**

**Thaw quickly at 37°C, mix, and put in an ice+water bath to cool.**

**Avoid Repeated Freeze/Thaw**

**FOR RESEARCH USE ONLY. NOT FOR HUMAN OR DRUG USE.**

---

Signature of Analyst

---

Date of Analysis

Phone: 1-903-581-8284 FAX: 1-903-581-0491 Email: [contactCTI@aol.com](mailto:contactCTI@aol.com)

Web Site: [www.ComplementTech.com](http://www.ComplementTech.com)