

CERTIFICATE OF ANALYSIS

Product Information

Product Name: TNF- α , Human

Cat. No.: Z01001-10; Z01001-50; Z01001-1

Lot No.: P50031608

Size: 10 μ g/vial; 50 μ g/vial; 1 mg/vial

Storage Condition: Lyophilized TNF-alpha remains stable at room temperature for three weeks, but it is best stored desiccated below -18 $^{\circ}$ C. Upon reconstitution TNF-alpha should be stored at 4 $^{\circ}$ C for up to seven days. For long term storage it is recommended that a carrier protein (0.1% HSA or BSA) be added. Avoid repeated freeze-thaw cycles.

Quality Control

Test Items	Specifications	Results
Physical Appearance	White Freeze-dried Powder	Conformed
Purity (SDS-PAGE & HPLC))	> 98%	Conformed
Specific Activity	> 3.3 $\times 10^7$ IU/mg	9.1 $\times 10^7$ IU/mg
Molecular Weight	17.3 \pm 1.7KDa	Conformed
Bacterial Endotoxin	< 0.2 EU/ μ g	Conformed

Caution:

For laboratory use only. Not for household use. If you have any questions about the Certificate of Analysis, please contact our customer service representative at 1-877-436-7274 (Toll-Free), or 1-732-885-9188.

Certified by: Joe Wang Date: 12/10/2016
Protein Products Department