

CERTIFICATE OF ANALYSIS

Product Information

Product Name:	TNF- α , Human (P. pastoris-expressed)
Cat. No.:	Z02682-10, Z02682-50, Z02682-1
Lot No.:	P50131408
Size:	10 μ g/vial; 50 μ g/vial; 1 mg/vial
Storage Condition:	Lyophilized recombinant human Tumor Necrosis Factor-Alpha (rhTNF-alpha) remains stable up to 12 months at lower than -70°C from date of receipt. Upon reconstitution, rhTNF-alpha should be stable up to 4 weeks at 4°C or up to 6 months at -20°C.

Quality Control

Test Items	Specifications	Results
Physical Appearance	White Freeze-dried Powder	Conformed
Purity (SDS-PAGE & HPLC)	> 95%	Conformed
Biological Activity (EC ₅₀)	< 0.08ng/ml	Conformed
Molecular Weight	17.4 kDa	Conformed
Bacterial Endotoxin	< 1 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: 08/25/2014
Protein Products Department