

CERTIFICATE OF ANALYSIS

Product Information

Product Name:	Tumor Necrosis Factor-alpha (TNF-alpha), Human
Cat. No.:	Z02685-10; Z02685-50; Z02685-1
Lot No.:	P20011203
Size:	10 µg/vial; 50 µg/vial; 1mg/vial
Storage Condition:	Lyophilized recombinant human Tumor Necrosis Factor-Alpha (rhTNF-alpha) remains stable up to 12 months at -80°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)	> 95%	Conformed
Purity (HPLC)	> 95%	Conformed
Activity(ED ₅₀)	< 0.13 ng/ml	0.011 ng/ml
Molecular Weight	18.3±1.8kDa	Conformed
Bacterial Endotoxin	< 1.0 EU/µg	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:  Date: 01/24/2013

Protein Department