proteintech®
Antibodies | ELISA kits | Proteins

Catalog Number: HZ-1014-GMP

Data Sheet

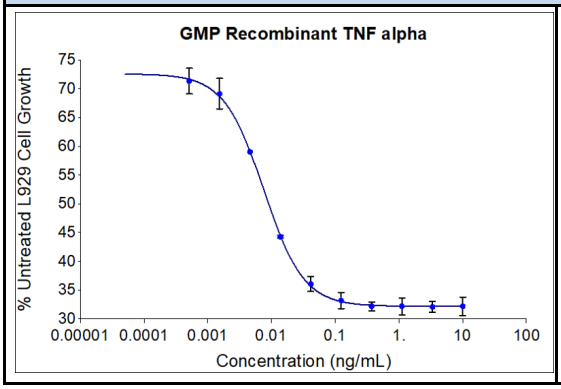
GMP HumanKine® TNF alpha (Recombinant Human)

Animal Component-Free	Human cell expressed	Tag-Free	Endotoxin Free

Product Description	
Animal-free Recombinant Human TNF alpha is expressed in human 293 cells and has been shown by gel filtration to be predominantly a non-covalently linked homotrimer, with a molecular mass of 51 kDa. The E. coli form is not a trimer. The cytokine is produced in a human cell express ion system with serum free, chemically defined media.	
Alternative Names	Cachectin, DIF, TNF, TNF a, TNF alpha, TNFA, TNFSF2, Tumor necrosis factor
Accession Number	P01375
Source	Human Embryonic Kidney cells (HEK293). HEK293-derived TNF alpha protein
Species Reactivity	human,mouse
Adventitious Virus	Master Cell Bank tested Negative for Adventitious Viruses

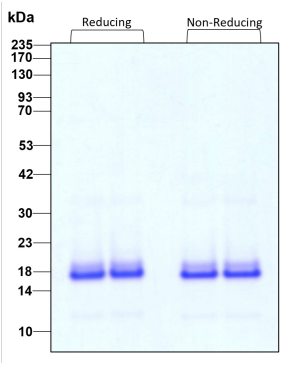
Specifications		
Test	**Method**	**Specification**
Activity	Dose-dependent cytotoxicity of the TNF alpha sensitive cell line L-929 in the presence of Actinomycin D	0.002-0.026 ng/mL
Molecular Mass	SDS-PAGE	17-20 kDa reduced and non-reduced, non-disulfide bonded homotrimer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<0.1 EU/μg
Mycoplasma	PCR	Not Detected

Activity Data



GMP Recombinant human TNF alpha (HZ-1014-GMP) demonstrates does-dependent cytotoxicity in the L929 mouse adipose cell line. Cell number was quantitatively assessed by PrestoBlue® cell viability reagent. L929 cells were treated with increasing concentrations of GMP recombinant TNF alpha for 72 hours in the presence of actinomycin D. The EC50 was determined using a 4-

SDS-PAGE



Purity of recombinant human TNF alpha was determined by SDS- polyacrylamide gel electrophoresis. The protein was resolved in an SDS- polyacrylamide gel in reducing and non-reducing conditions and stained using Coomassie blue.

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Preparation	
Shipping Temperature	ambient temperature
Vial Information	1x PBS, See Certificate of Analysis for details
Formulation	1x PBS, See Certificate of Analysis for details
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile 1xPBS pH 7.4 containing 0.1% endotoxin-free recombinant human serum albumin (HSA).Gently swirl or tap vial to mix.

	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
Stability and Storage	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
	Avoid repeated freeze-thaw cycles.		

Proteintech GMP Quality Policy
HumanKine® GMP Proteins

Invitro recombinant protein production can be prone to variability due to various reasons ranging from quality of raw materials to inconsistency in the process. Therefore, HumanKine®, a proteintech brand's GMP proteins are produced and tested under an ISO 13485 certified quality management system in a clean room facility. Proteintech manufactures the GMP HumanKine® products according to the applicable sections in the following documents: USP Chapter 1043 (Ancillary Materials for Cell, Gene, and Tissue-Engineered Products, USP Chapter 92 (Growth Factors and Cytokines Used in Cell Therapy Manufacturing), WHO TRS, No. 822, 1992 Annex 1 (Good Manufacturing Practices for Biological Products), Ph. Eur. General Chapter 5.2.12, and EudraLex – Volume 4 – Part IV (Guidelines on GMP specific to ATMPs). Proteintech strives to achieve the utmost quality GMP raw material ensuring all applicable guidelines are taken into consideration.

The QMS is built to provide our customers with consistent and pure product delivered by documented processes, qualified personnel, validated processes, qualified equipment, qualified vendors, and a stringent final product release process. Although the final product release process is important, Proteintech performs in-process QC steps after each major manufacturing stage. Production records and facilities may be available for an inspection by approved personnel.

Our GMP policy covers all the aspects of production; from raw materials, facility, equipment, and Instruments to training and personal hygiene of staff. It also guarantees that the process is explicit, validated and well documented for transparency and traceability.

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