

**HumanKine<sup>®</sup> TNF alpha (Recombinant Human)**



Animal Component-Free	Human cell expressed	Tag-Free	Endotoxin Free
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**Product Description**

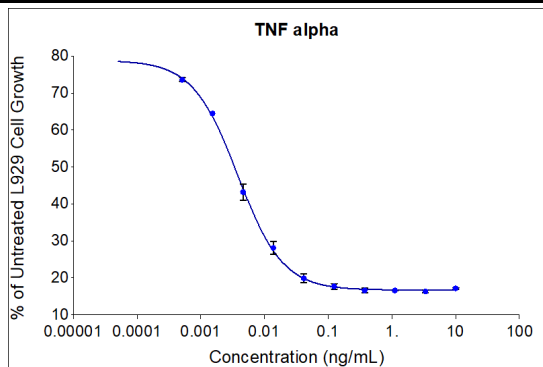
Animal-free Recombinant Human TNF alpha is expressed in human 293 cells and has been shown by gel filtration to be predominantly a non-covalently linked homotrimer, with a molecular mass of 51 kDa. The E. coli form is not a trimer. The cytokine is produced in a human cell expression system with serum free, chemically defined media.

Alternative Names	Cachectin, DIF, TNF, TNF a, TNF alpha, TNFA, TNFSF2, Tumor necrosis factor
Source	Human Embryonic Kidney cells (HEK293). HEK293-derived TNF alpha protein
Species Reactivity	human,mouse,rat

**Specifications**

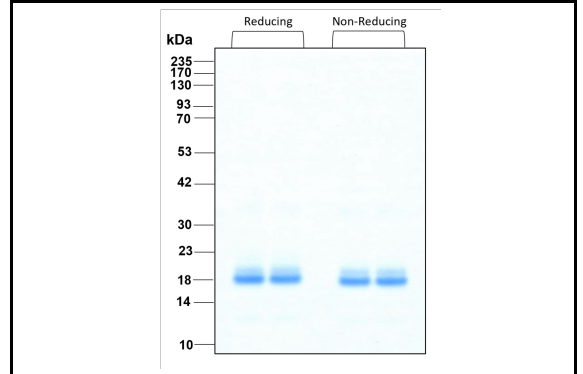
Test	Method	Specification
Activity	Dose-dependent cytotoxicity of the TNF alpha sensitive cell line L-929 in the presence of Actinomycin D	0.002-0.026 ng/mL EC50
Molecular Mass	SDS-PAGE	17 kDa, non-disulfide bonded homotrimer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<1 EU/μg

**Activity Data**



Recombinant human TNF alpha (HZ-1014) demonstrates dose-dependent cytotoxicity in the L929 mouse adipose cell line. Cell number was quantitatively assessed by PrestoBlue<sup>®</sup> 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**



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

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	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.			

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