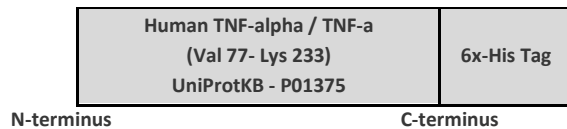


TNF-alpha, Human Recombinant

CATALOG #:	P1395-10	10 µg
	P1395-50	50 µg
ALTERNATE NAMES:	TNF-alpha, Tumor necrosis factor ligand superfamily member 2, TNF-a, Cachectin, DIF, TNFA, TNFSF2	
SOURCE:	CHO cells (Val 77 – Thr 233)	
PURITY:	> 95% by SDS - PAGE	
MOL. WEIGHT:	18 kDa with a 6xHis tag at the C-terminus	



FORMULATION:	Lyophilized from 0.22 µm filtered PBS (pH 7.4) with 5% trehalose
RECONSTITUTION:	Centrifuge the vial prior to opening. Reconstitute in sterile PBS (pH 7.4). Do not vortex.
STORAGE CONDITIONS:	Aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

DESCRIPTION:

Tumor Necrosis Factor-α (TNF-α) is a highly pleiotropic cytokine with multiple activities other than its originally discovered role of tumor necrosis in rodents. It contributes to both inflammations during infections and anti-inflammatory/tissue repair processes after clearance of infection. TNF-α is mainly produced by activated macrophages, T lymphocytes, and natural killer (NK) cells. The activity of TNF-α is mediated through two cell surface receptors, TNF-R1 (p55) and TNF-R2 (p75) that differ in their signaling activity. TNF-α's primary role is in the regulation of immune cells. It can induce cell death of certain tumor cell lines. About 28% of cancers are susceptible to direct cell killing mediated by soluble TNF-α.

BIOLOGICAL ACTIVITY:

ED₅₀ is typically < 1 ng/ml. The specific activity was determined by the dose-dependent cytotoxicity of the TNF-alpha sensitive cell line L-929 cells in the presence of the metabolic inhibitor Actinomycin D using BioVision's Quick Cell Proliferation colorimetric Assay Kit Plus (Catalog # K302).

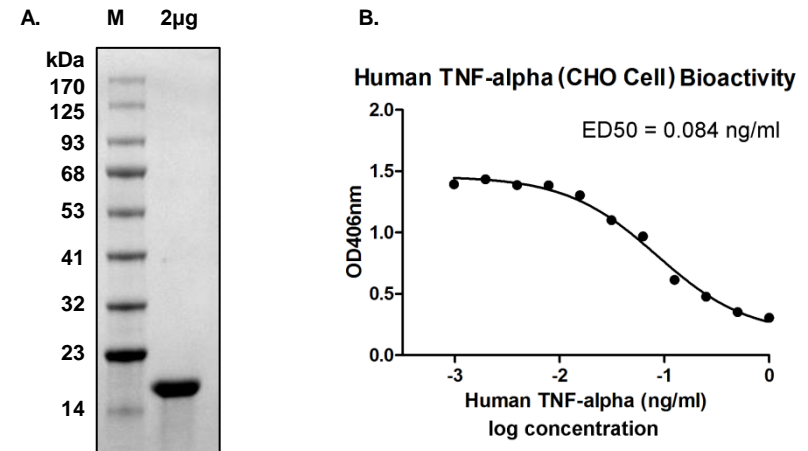


Fig. A. SDS-PAGE (4-20%) of Recombinant TNF-alpha: 2 µg of the recombinant TNF-alpha is loaded under reducing conditions and stained with Coomassie Blue.

Fig. B. Biological activity: TNF-alpha's cytotoxicity effect was measured in a cell based assay with BioVision's Quick Cell Proliferation Colorimetric Assay kit (Cat. No. K302). The ED₅₀ for this effect is typically less than 1ng/mL

RELATED PRODUCTS:

- TNF-alpha, human recombinant (**Cat. No. 1050**)
- TNF-alpha, murine recombinant (**Cat. No. 1051**)
- TNF-alpha, rat recombinant (**Cat. No. 1052**)
- TNF-alpha Antibody (**Cat. No. 3052R**)
- TNF-alpha Antibody (**Cat. No. 3053R**)
- TNF-alpha Antibody (**Cat. No. 3054**)
- TNF alpha (mouse) ELISA Kit (**Cat. No. K1051**)
- TNF alpha (rat) ELISA Kit (**Cat. No. K1052**)
- TACE (TNF-α converting enzyme), human recombinant (**Cat. No. 7607**)

FOR RESEARCH USE ONLY! Not to be used in humans.