

## Recombinant Human TNF-alpha/TNFA Protein

Catalog No. PKSH033490

*Note:* Centrifuge before opening to ensure complete recovery of vial contents.

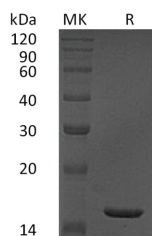
### Description

<b>Synonyms</b>	Tumor Necrosis Factor; Cachectin; TNF-Alpha; Tumor Necrosis Factor Ligand Superfamily Member 2; TNF-a; TNF; TNFA; TNFSF2
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Val77-Leu233
<b>Accession</b>	P01375
<b>Calculated Molecular Weight</b>	17.5 kDa
<b>Observed molecular weight</b>	16 kDa
<b>Tag</b>	None
<b>Bioactivity</b>	Measured in a cytotoxicity assay using L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED50 for this effect is 10-50 pg/ml.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.01 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 6% Sucrose, 4% Mannitol, 0.05% Tween 80, pH 6.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### For Research Use Only

## Background

TNF $\alpha$  is a homotrimer with a subunit molecular mass of 17 kD cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It plays a major role in growth regulation; differentiation; inflammation; viral replication; tumorigenesis; autoimmune diseases and in viral; bacterial; fungal; and parasitic infections. Besides inducing hemorrhagic necrosis of tumors; TNF was found to be involved in tumorigenesis; tumor metastasis; viral replication; septic shock; fever; inflammation; and autoimmune diseases including Crohn's disease; and rheumatoid arthritis as well as graft-versus-host disease.

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