

Recombinant Human TNF-alpha Protein

Catalog No	RP00993	Category	
Description	Recombinant Human TNF-alpha Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Val 77 - Leu 233) of human TNF-alpha (Accession #NP_000585.2) fused with a 6×His tag at the C-terminus.		

Sequence Information

Species	Human	Gene ID	7124
Tags	6×His tag at the C-terminus	Swiss Prot	P01375
Synonyms	DIF;TNF-alpha;TNFA;TNFSF2;TNLG1F		
AA Sequence	VRSSRTPSDKPVAVHVVANPQAEGLQWLNRANALLANGVELRDNLVVPSEGLYLIYS QVLFKGGCPSTHVLLTHTISRIAVSYQTKVNLLSAIKSPCQRETPEGAEAKPWYEPIYL GGVFQLEKGDRLSAEINRPDYLDFAESGQVYFGIIAL		

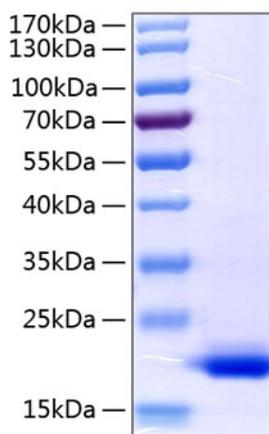
Product information

Source	HEK293 cells
Purity	> 95% by SDS-PAGE.
Endotoxin	< 0.1 EU/μg of the protein by LAL method.
Formulation	Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.
Reconstitution	Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.
Storage	Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

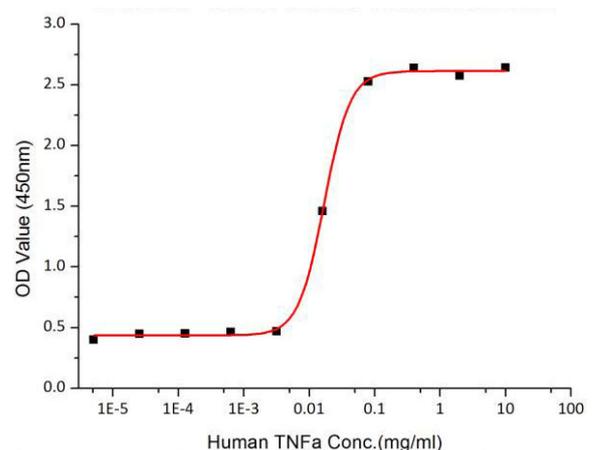
Background

Tumor necrosis factor alpha (TNF-alpha), also known as TNF, TNFA or TNFSF2, is the prototypic cytokine of the TNF superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer. Knockout studies in mice also suggested the neuroprotective function of this cytokine.

Validated Data



Recombinant Human TNF-alpha Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 18 kDa.



Recombinant Human TNF-α protein was measured by NF-κB reporter assay in HEK293 cells. The ED50 for this effect is 10-50 pg/mL.