TNF-α/TNFA/TNFSF2, Human, Recombinant

Cat. No. : PCK051

General Information

Synonyms	TNFSF2;Cachectin;Differentiation-inducing factor (DIF);Necrosin;Cytotoxin;TNS_x0002_F1A
Species	Human
Expression host	E.coli
Sequence	MVRSSSRTPSDKPVAHVVANPQAEGQLQWLNRRANALLANGVELRDNQLVVPSEGLYLIYSQVLFKGQGCPSTHVLLTHTISRIAVSYQTKVNLLSAIKSPCQRETPEGAEAKPWYEPIYLGGVFQLEKGDRLSAEINRPDYLDFAESGQVYFGIIAL with polyhistidine tag at the C-terminus.
Accession	P01375.1
Tag	His-tag at the C-terminus
Mol mass	18.3 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce cytotoxicity in L929 cells in the presence of actinomycin D. The ED50 for this effect is < 0.2 pg/mL. The specific activity of recombinant human TNF alpha is approximately > 9 × 10^9 IU/mg.

Product feature

Purity	> 98% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

TNF-α is a kind of pleiotropic pro-inflammatory cytokine. It is secreted by various cells, such as adipocytes, activated monocytes, macrophages, B cells, T cells and fibroblasts. Proteolysis of the integral membrane precursor form of TNF-α from cells soluble can release homotrimeric TNF-α. TNF-α can bind with some TNF-α receptors induces apoptosis, besides, also trigger other responses depending on cell type, receptor expression, and signal transduction status. TNF-α participate in the inflammatory response.

SDS-PAGE