Recombinant Human Tumor Necrosis Factor- alpha, His (rhTNF-α, His)
Catalog Number: 103-01H

Description	Tumor necrosis factor alpha (TNF-α) is produced by neutrophils, activated lymphocytes, macrophages, NK cells, LAK cells, astrocytes endothelial cells, smooth muscle cells and some transformed cells. TNF-α occurs as a secreted, soluble form and as a membrane-anchored form, both of which are biologically active. The naturally-occurring form of TNF-α is glycosylated, but non-glycosylated recombinant TNF-α has comparable biological activity. The biologically active native form of TNF-α is reportedly a trimer. Human and murine TNF-α show approximately 79% homology at the amino acid level and cross reactivity between the two species.
Synonyms	Cachectin, DIF, TNFA, TNFSF2, TNF-alpha, APC1 protein
AA Sequence	MHHHHHHVRS SSRTPSDKPV AHVVANPQAE GQLQWLNRRA NALLANGVEL RDNQLVVPSE GLYLIYSQVL FKGQGCPSTH VLLTHTISRI AVSYQTKVNL LSAIKSPCQR ETPEGAEAKP WYEPIYLGGV FQLEKGDRLS AEINRPDYLD FAESGQVYFG IIAL
Source	*Escherichia coli*
Molecular Weight	Approximately 17.5 kDa. a single, non-glycosylated, polypeptide chain containing 157 amino acids fragment (77-233) and having a molecular mass of 21.85 kDa with an amino-terminal hexahistidine tag.
Purity	>95% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active. Specific activity $\geq 2 \times 10^7$ units/mg, as determined by murine L929 cell cytolysis in the presence of Actinomycin D.
Physical Appearance	White lyophilized powder.
Formulation	Lyophilized from a 0.2μm filtered concentrated (1mg/ml) solution in PBS, pH 7.0.
Endotoxin	< 1EU/μg of growth factor as determined by LAL method.
Reconstitution	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
Storage	Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.
Usage	This product is for research use only. It is not approved for use in humans, animals, or *in vitro* diagnostic procedures.