

Recombinant Rat TNF-alpha Protein

Product Information

Product Name	Cat#	Size
Recombinant Rat TNF-alpha Protein	90628ES08	5 µg
	90628ES60	100 µg
	90628ES76	500 µg

Product Description

Tumor necrosis factor alpha (TNF- α), also known as cachectin, is a cachectin, is a polypeptide cytokine produced by monocytes and macrophages. TNF α receptor signaling can simultaneously activate caspase 8, the transcription factor, NF- κ B and the kinase, JNK. Human TNF- α shares 97% aa sequence identity with rhesus and 71%-92% with bovine, canine, cotton rat, equine, feline, mouse, porcine, and rat TNF- α . TNF- α occurs as a secreted, soluble form and as a membrane-anchored form, both of which are biologically active. Inflammation is associated with insulin resistance, and TNF- α and IL-6 may affect glucose uptake. A wide variety of evidence has pointed to a critical role of TNF- α in tumour proliferation, migration, invasion and angiogenesis.

Product Properties

Synonyms	Tumor Necrosis Factor, TNFA, TNFSF2, Cachectin, Cytotoxin, Differentiation-inducing factor, DIF
Accession	P16599
GeneID	24835
Source	E.coli-derived rat TNF- α /TNFSF2 protein, Leu80-Leu235.
Molecular Weight	Approximately 17.2 kDa.
AA Sequence	LRSSSQNSSD KPVAVHVVANH QAEEQLEWLS QRANALLANG MDLKDNLV V PADGLYLIYS QVLFKGGQCP DYVLLTHTVS RFAISYQEKV SLLSAIKSPC PKDTPEGAEL KPWYEPMYLG GVFQLEKGD LLSAEVNLPKY LDITESGQVY FGVIAL
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 98% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a cytotoxicity assay using murine L929 cells is less than 0.05 ng/mL, corresponding to a specific activity of > 2.0 × 10 ⁷ IU/mg in the presence of actinomycin D. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.2, 150 mM NaCl. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20 °C for 1 year.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 °C under sterile conditions after reconstitution.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!