

Analytical Data Sheet

Lot number

9022000

not for drug use

Product number

H-9555

Product

rec TNF- α (human)

Description: TNF- α is a pleiotrophic pro-inflammatory cytokine secreted by various cells including adipocytes, activated monocytes, B cells, T cells and fibroblasts. It belongs to the TNF family of ligands and signals through two receptors, TNFR1 and TNFR2. TNF- α is cytotoxic to a wide variety of tumor cells and is an essential factor in mediating the immune response against bacterial infections. TNF- α also plays a role in the induction of septic shock, auto immune diseases, rheumatoid arthritis, inflammation, and diabetes. Recombinant human TNF- α is a soluble 157 amino acid protein (17.4 kDa) which corresponds to C-terminal extracellular domain of the full length transmembrane protein.

Source: *E.coli*

Purity: \geq 98% by SDS-PAGE gel and HPLC analyses

Endotoxin: Endotoxin level is <0.1 ng/ug of protein (<1 EU/ug)

Protein Content: Verified by UV Spectroscopy and/or SDS-PAGE gel.

Formulation: Sterile filtered through a 0.2 micron filter. Lyophilized from 3 mM Tris, pH 8.0.

Reconstitution: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. **Note: Allow the reconstituted vial to sit at room temperature for 2 hours before use.** Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage/Stability: The lyophilized protein is stable at room temperature for up to 1 month. Working aliquots stored with a carrier protein are stable for at least 12 months at -20°C to -80°C. Avoid repeated freeze/thaw cycles.

Biological Activity: The ED₅₀ as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is \leq 0.05 ng/ml, corresponding to a specific activity of $\geq 2 \times 10^7$ units/mg.

AA Sequence: MVRSSSRTPSD KPVAVVAVNP QAEGQLQWLN RRANALLANG VELRDNQLVV PSEGLYL IYS QVLFKGGQCP STHVLLTHTI SRIAVSYQTK VNLLSAIKSP CQRETPEGAE AKPWYEPIYL GGVFQLEK GD RLSAEINRPD YLDFAESGQV YFGIIAL

Usage: For Research Use Only. Not for use in diagnostic or therapeutic procedures.

Latest update: January 24, 2012

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