

Product Information Sheet

Recombinant Rat TNF- α

Catalog# 400-14

Source: *E.coli*

Description: TNF- α is a pleiotropic pro-inflammatory cytokine secreted by various cells including adipocytes, activated monocytes, macrophages, 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 rat TNF- α is a soluble 157 amino acid protein (17.3 kDa) which corresponds to C-terminal extracellular domain of the full length transmembrane protein.

Synonyms: Tumor Necrosis Factor, TNFSF2, Cachectin, Differentiation-inducing factor (DIF), Necrosin, Cytotoxin

Sequence: MLRSSSQNSS DKPVVHVVAN HQAEEQLEWL SQRANALLAN GMDLKDNLV VPADGLYLIY SQVLFKGQGC PDYVLLTHTV
SRFATSYQEK VSLLSAIKSP CPKDTPEGAE LKPWYEPMYL GGVSQLEKGD LLSAEVNLPK YLDITESGQV YFGVIAL
See Certificate of Analysis for details.

Authenticity: Verified by N-terminal and Mass Spectrometry analyses (when applicable).

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

Endotoxin: Endotoxin level is < 0.1 ng/ μ g of protein (< 1 EU/ μ g).

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

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

For a list of references please visit our website at www.peprotech.com

Country of Origin: USA

Lot-specific information is not available on Product Information Sheet.

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

Storage/Stability:

Product Form	Temperature	Storage Time
Lyophilized	-20°C to -80°C	See expiration date
Lyophilized	4°C	6 months
Lyophilized	RT	1 month
Diluted as per CoA	-20°C to -80°C	12 months
Diluted as per CoA	2°C to 8°C	1 week
**Avoid repeated freeze-thaw cycles.		