

Synonyms:

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

Source: *E.coli*

Structure:

The protein carries no tag.

AA Sequence:

VRSSSRTPSD KPVAHVVANP QAEGQLQWLN
RRANALLANG VELRDNQLVV PSEGLYLIYS
QVLFGQGCP STHVLLTHTI SRIAVSYQTK
VNLLSAIKSP CQRETPEGAE AKPWYEPIYL
GGVFQLEKGD RLSAEINRPD YLDFAESGQV
YFGIHAL

Molecular Weight: 17.4kDa

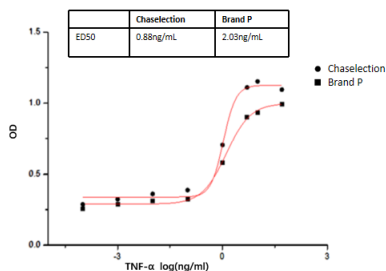
SDS-PAGE

Endotoxin: < 0.1 EU/ μ g

Formulation: PBS, trehalose, mannitol, pH 7.2

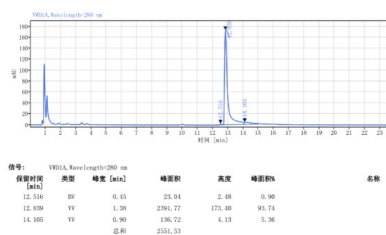
Features:

1) Bioactivity



The ED_{50} as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is ≤ 0.05 ng/ml, corresponding to a specific activity of $\geq 2 \times 10^7$ units/mg.

2) HPLC Analyses



Greater than 98% by HPLC analyses

Reconstitution:

1. Before opening, please briefly centrifuge the contents to the bottom;
2. It is recommended to initially dissolve in sterile deionized water to an appropriate concentration (recommended concentration is 0.2-1mg/ml);
3. If further dilution is required, it is recommended to dilute the solution with a solution containing carrier proteins (such as 0.1% BSA, 10% FBS, and 5% HSA).

Shipping & Storage:

The product is shipped with blue ice.

If long-term storage is required, this product should be stored at ≤ -20 °C, please avoid repeated freeze-thaw cycles.

1. Dry powder can be stored at ≤ -20 for at least 24 months;
2. After reconstitution, it can be stored for 1 month under sterile conditions at 2-8 °C ;
3. After reconstitution, it can be stored for 12 months under sterile conditions at $-20 \sim -70$ °C.

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, autoimmune diseases, rheumatoid arthritis, inflammation, and diabetes. Human and murine TNF- α demonstrate significant cross-species reactivity. TNF- α exists in two forms; a type II transmembrane protein, and a mature soluble protein. The TNF- α transmembrane protein is proteolytically cleaved to yield a soluble, biologically active, 17 kDa TNF- α , which forms a non-covalently linked homotrimer in solution. 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.

