

DATASHEET Version 20181206

TNF-α (80-235aa), Mouse

Cat. No.: Z03333-50

Size: 50.0 ug

Synonyms: TNF-alpha, Tumor necrosis factor ligand superfamily member 2, TNF-a, Cachectin, DIF, TNFA, TNFSF2

Description:

Tumor Necrosis Factor-Alpha (TNF-alpha) plays a major role in growth regulation, differentiation, inflammation, viral replication, tumorigenesis, and autoimmune disease. Besides inducing hemorrhagic necrosis of tumors, TNF has been found to be involved in tumorigenesis, tumor metastasis, viral replication, septic shock, fever, inflammation, and autoimmune diseasesuch as Crohn's disease, rheumatoid arthritis and graft-versus-host disease. TNF alpha-1a is a potent lymphoid factor that exerts cytotoxic effects on a wide range of tumor cells and certain other target cells.

Recombinant MouseTNF- α (80-235aa) produced in *E. coli* is a singlenon-glycosylated polypeptidechain containing 156 amino acids. A fully biologically active molecule, rmTNF- α (80-235aa) has a molecular mass of 17.3 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 LRSSSQNSSD KPVAHVVANH QVEEQLEWLS QRANALLANG 00041 MDLKDNQLVV PADGLYLVYS QVLFKGQGCP DYVLLTHTVS 00081 RFAISYQEKV NLLSAVKSPC PKDTPEGAEL KPWYEPIYLG 00121 GVFQLEKGDQ LSAEVNLPKY LDFAESGQVY FGVIAL

Source: E. coli

Biological Activity: $ED_{50} < 0.05$ ng/mL, measured in a cytotoxicity assay using L-929 mouse fibrosarcoma cells, corresponding to a specific activity of >2 x 10 7 units/mg.

Molecular Weight: 17.3 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

Purity: > 98% as analyzed by SDS-PAGE&HPLC.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant MouseTNF- α (80-235aa) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Mouse TNF- α (80-235 aa) should be stable up to 1 week at 4°C or up to 3 months at -20°C.