DATASHEET
Version 20181206

TNF-α, Mouse (P. pastoris-expressed)

Cat. No.: Z02918-20

Size: 20.0 ug

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

Description:

Sharing 79% sequence identity with human Tumor necrosis factor-alpha (hTNF-α), mouse Tumor Necrosis Factor-alpha (mTNF-α) is a cytokine mainly expressed by immune cells [1]. A type II transmembrane protein, TNF-α is further proteolytically processed to a soluble form [2]. The trimeric active TNF-α[3] then exerts its diverse biological properties including gapoptosis, inflammation, autoimmunity and cell proliferation by binding to TNF Receptor 1 and 2 [4].

Recombinant mouse Tumor Necrosis Factor-alpha (rmTNF-α) produced in *P.pastoris* is a fully biologically active polypeptide chain of 152 amino acids with a molecular mass of 17 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 SQNSSDKPVA HVVANHQVEE QLEWLSQRAN ALLANGMDLK
00041 DNQLVVPADG LYLVYSQVLF KGQGCPDYVL LTHTVSRFAI
00081 SYQEKVNLLS AVKSPCPKDT PEGAELKPWY EPIYLGGVFQ
00121 LEKGDQLSAE VNLPKYLDFA ESGQVYFGVI AL
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Source: *P. pastoris*

Species: Mouse

Biological Activity: ED_{50}<0.01ng/ml, measured by cytotoxicity assay using L929 cells, corresponding to a specific activity of >1 x 10^8units/mg.

Molecular Weight: 17kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH_2O or PBS at 100 μg/ml.

Purity: > 95% as analyzed by reducing SDS-PAGE.

Endotoxin Level: <1 EU/μg, determined by LAL method.

Storage: Lyophilized recombinant mouse Tumor Necrosis Factor-alpha (rmTNF-α) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rmTNF-α should be stable up to 1 week at 4°C or up to 2 months at -20°C.

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