

DATASHEET

Version 20181206

TNF- α , Mouse (*P. pastoris*-expressed)

Cat. No.: Z02918-100

Size: 100.0 ug

Synonyms: TNF-alpha, Tumor necrosis factor ligand and 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:

```
00001 SQNSSDKPVA HVVANHQVEE QLEWLSQRAN ALLANGMDLK
00041 DNQLVVPADG LYLVSQVLF KGGGCPDYVL LTHTVSRFAI
00081 SYQEKVNLLS AVKSPCPKDT PEGAELKPWY EPIYLGGVFQ
00121 LEKGDQLSAE VNLPKYLDFA ESGQVYFGVI AL
```

Source: *P. pastoris*

Species: Mouse

Biological Activity: ED₅₀ < 0.01 ng/ml, measured by cytotoxicity assay using L929 cells, corresponding to a specific activity of > 1 x 10⁸ units/mg.

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

Formulation: Lyophilized after extensive dialysis against PBS.

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

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

Endotoxin Level: < 1 EU/ μ g, 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.