

PRODUCT DATA SHEET



Bioworld Technology, Inc.

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

Catalog Number: BK0348-1mg

Source: P. pastoris

Quantity: 1mg

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.

Molecular Weight:

17kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by reducing SDS-PAGE.

Biological Activity:

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

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

SQNSSDKPVAH-
VVANHQVEEQLEWLSQRANALLANGMDLKDN
QLVVPADGLYL-
VYSQVLFKGGQCPDYVLLTHTVSRFAI-
SYQEKNLLSAV-
KSPCPKDTPEGAELKPWYEPIYL-
GGVFQLEKGDQLSAEVNLPKYLDFAESGQVYFG
VIAL

Endotoxin:

<1 EU/ μ g, determined by LAL method.

Reconstitution:

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

Storage:

Lyophilized recombinant mouse Tumor Necrosis Factor-alpha (rmTNF- α) remains stable up to 6 months at -80 $^{\circ}$ C from date of receipt. Upon reconstitution, rmTNF- α should be stable up to 1 week at 4 $^{\circ}$ C or up to 2 months at -20 $^{\circ}$ C.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.