

Recombinant Mouse TNF alpha Protein

CAT. NO: R00002-1

Size: 100µg

Description

Tumor necrosis factor (TNF, tumor necrosis factor alpha, TNF α , cachexin, or cachectin) is a cell signaling protein (cytokine) involved in systemic inflammation and is one of the cytokines that make up the acute phase reaction. It is produced chiefly by activated macrophages, although it can be produced by many other cell types such as CD4+ lymphocytes, NK cells, neutrophils, mast cells, eosinophils, and neurons. The primary role of TNF is in the regulation of immune cells. TNF, being an endogenous pyrogen, is able to induce fever, apoptotic cell death, cachexia, inflammation and to inhibit tumorigenesis and viral replication and respond to sepsis via IL1 & IL6 producing cells. Dysregulation of TNF production has been implicated in a variety of human diseases including Alzheimer's disease, cancer, major depression, psoriasis and inflammatory bowel disease (IBD). Though controversial, studies of depression and IBD are currently being linked to TNF levels. Recombinant TNF is used as an immunostimulant under the INN tasonermin. TNF can be produced ectopically in the setting of malignancy and parallels parathyroid hormone both in causing secondary hypercalcemia and in the cancers with which excessive

production is associated.

Amino Acid Sequence:

LRSSS QNSSD KPVAH VVANH QVEEQ
LEWLS QRANA LLANG MDLKD NQLVV
PADGL YLVYS QVLFK GQGCP DYVLL
THTVS RFAIS YQEKV NLLSA VKSPC
PKDTP EGAEL KPWYE PIYLG GVFQL
EKGDQ LSAEV NLPKY LDFAE SGQVY
FGVIA L

Source: E. coli L81-L235

Species: mouse

Purity: >95%, by SDS-PAGE quantitative densitometry by Coomassie® Blue Staining.

Molecular Weight: 17.2KD

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstitute in ddH₂O at 100 µg/mL.

Endotoxin: Less than 1 EU/µg of TNF alpha as determined by LAL method.

Storage:

Lyophilized recombinant mouse TNF alpha remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rmTNF alpha remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.