

RECOMBINANT MOUSE TNF- α

Catalog # 02750	10 mg per vial
Catalog # 02950	50 mg per vial

PRODUCT DESCRIPTION:

Tumor Necrosis Factor - alpha (TNF- α) is produced by neutrophils, activated lymphocytes, macrophages, NK cells, LAK cells, astrocytes, endothelial cells, smooth muscle cells. TNF- α occurs as a secreted, soluble form and as a membrane anchored form, both of which are biologically active. TNF- α is a pleiotropic factor activating multiple signal transduction pathways and inducing or suppressing the expression of a wide variety of genes. TNF- α plays a critical role in mediation of the inflammatory response and in influencing resistance to infections and tumor growth. It is a trimeric protein that binds to two types of receptor TNF-R1 (p55) and TNF-R2 (p75). Recombinant mouse TNF- α is a 17 kDa protein containing 157 amino acid residues.

SOURCE:

A DNA sequence encoding mature soluble mouse TNF- α was expressed in E. coli.

PURITY:

Greater than 97% as determined by SDS-PAGE and visualized by silver stain. Endotoxin level is less than 0.1 ng per μ g of the cytokine, as determined by the LAL method.

FORMULATION:

Lyophilized from a sterile-filtered solution in PBS containing 50 μ g of bovine serum albumin per 1 μ g of cytokine.

RECONSTITUTION:

It is recommended that sterile phosphate-buffered saline containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 1 μ g/ml of the cytokine.

STABILITY/STORAGE:

The lyophilized powder is stable for greater than six months at -20°C to -70°C.

Reconstituted mouse TNF- α can be stored under sterile conditions at 2°C to 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

Avoid repeated freezing and thawing.

ACTIVITY:

The biological activity of recombinant mouse TNF- α was measured in a cytotoxicity assay using the TNF-sensitive L-929 cell line in the presence of the metabolic inhibitor, actinomycin D. The ED₅₀ for this effect is typically 0.02-0.05 ng/mL.

**THIS REAGENT IS FOR RESEARCH USE ONLY.
IT IS NOT TO BE ADMINISTERED TO HUMANS.**