



Product Datasheet

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| Product Name | Recombinant Mouse Tumor Necrosis Factor-Alpha |
| Cata No | CB500154 |
| Source | Streptomyces Lividans |
| Synonyms | TNF-alpha, Tumor necrosis factor ligand superfamily member 2, TNF-a, Cachectin, DIF, TNFA, TNFSF2. |

Description

Tumor necrosis factor is a cytokine involved in systemic inflammation and is a member of a group of cytokines that all stimulate the acute phase reaction. TNF is mainly secreted by macrophages. TNF causes apoptotic cell death, cellular proliferation, differentiation, inflammation, tumorigenesis and viral replication, TNF is also involved in lipid metabolism, and coagulation. TNF's primary role is in the regulation of immune cells. Dysregulation and, in particular, overproduction of TNF have been implicated in a variety of human diseases- autoimmune diseases, insulin resistance, and cancer.

Tumor Necrosis Factor-a Mouse Recombinant produced in S.Lividans is a single, non glycosylated, polypeptide chain containing 156 amino acids and having a molecular mass of 17301.32 Dalton. The TNF-alpha is purified by standard chromatographic techniques

Purity

Greater than 98.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE

Biological Activity

The ED50 as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is < 0.05ng/ml, corresponding to a Specific Activity of 9×10^8 IU/mg.

Storage

Lyophilized Tumor Necrosis Factor-a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TNF-a should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Formulation

Each mg contains 50mM Tris-HCL pH-8 and 20mM NaCL

It is recommended to reconstitute the lyophilized Tumor Necrosis Factor-alpha in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

*** For Non-Clinical Research Use Only ***