

Rabbit Anti-Mouse TNF-alpha

ORDERING INFORMATION

Catalog Number: 103-PA09 Size: 100 μg

Formulation: Polyclonal Antibody; Lyophilized

Synonyms: Tnf; DIF; Tnfa; TNFSF2; Tnfsf1a; TNFalpha;

TNF-alpha

Antigen: Recombinant mouse TNF-alpha

Application: WB **Uniport:** P06804

Buffer: PBS pH 7.4 w/o preservative

Description:

Tumor necrosis factor alpha (TNF α), also known as cachectin and TNFSF1A, is the prototypic ligand of the TNF superfamily. It is a pleiotropic molecule that plays a central role in inflammation, apoptosis, and immune system development. TNF α is produced by a wide variety of immune and epithelial cell types. Mouse TNFα consisits of a 35 amino acid (aa) cytoplasmic domain, a 21 aa transmembrane segment, and a 179 aa extracellular domain (ECD). Within the ECD, mouse TNFα shares 94% as sequence identity with rat and 70%-77% with bovine, canine, cotton rat, equine, feline, human, porcine, rat, and rhesus TNFα. The 26 kDa type 2 transmembrane protein is assembled intracellularly to form a noncovalently linked homotrimer. Ligation of this complex induces reverse signaling that promotes lymphocyte costimulation but diminishes monocyte responsiveness. Cleavage of membrane bound TNFα by TACE/ADAM17 releases a 55 kDa soluble trimeric form of TNFα. TNFα trimers bind the ubiquitous TNF RI and the hematopoietic cell restricted TNF RII, both of which are also expressed as homotrimers. TNFα regulates lymphoid tissue development through control of apoptosis. It also promotes inflammatory responses by inducing the activation of vascular endothelial cells and macrophages. TNF α is a key cytokine in the development of several inflammatory disorders. It contributes to the development of type 2 diabetes through its effects on insulin resistance and fatty acid metabolism.

Reconstitution:

Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.

Stability:

The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8 °C. Frozen aliquots are stable for at least 6 months when stored at -20 °C. **Avoid repeated freeze-thaw cycles!**

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users!

This product is sold for Research Use Only!

Contact & Ordering Information: Angio-Proteomie, 11 Park Drive, Suite 12, Boston, MA 02215, USA. Tel: 617-549-2665; Fax: (480) 247-4337, angioproteomie@gmail.com