

## Product datasheet for **AP26031PU-N**

### Tnf Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	<b>Western Blot:</b> 2-5 µg/ml.
Reactivity:	Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Highly pure (> 95%) recombinant Mouse TNF-alpha (Leu80-Leu235) derived from <i>E. coli</i> .
Specificity:	This antibody detects Tumor necrosis factor (TNF-alpha).
Formulation:	PBS, pH 7.2 State: Purified State: Lyophilized purified Ig fraction
Reconstitution Method:	Restore in sterile water to a concentration of 0.1-1.0 mg/ml. Centrifuge vial prior to opening.
Purification:	Protein A Chromatography
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	tumor necrosis factor
Database Link:	<u><a href="#">Entrez Gene 21926 Mouse P06804</a></u>



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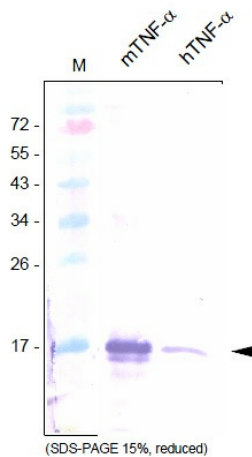
**Background:**

Tumor necrosis factor alpha (TNF $\alpha$ ), 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 $\alpha$  is produced by a wide variety of immune and epithelial cell types. Mouse TNF $\alpha$  consists of a 35 amino acid (aa) cytoplasmic domain, a 21 aa transmembrane segment, and a 179 aa extracellular domain (ECD). Within the ECD, mouse TNF $\alpha$  shares 94% aa sequence identity with rat and 70%-77% with bovine, canine, cotton rat, equine, feline, human, porcine, rat, and rhesus TNF $\alpha$ . 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 TNF $\alpha$  by TACE/ADAM17 releases a 55 kDa soluble trimeric form of TNF $\alpha$ . TNF $\alpha$  trimers bind the ubiquitous TNF RI and the hematopoietic cell restricted TNF RII, both of which are also expressed as homotrimers.

TNF $\alpha$  regulates lymphoid tissue development through control of apoptosis. It also promotes inflammatory responses by inducing the activation of vascular endothelial cells and macrophages. TNF $\alpha$  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.

**Synonyms:**

TNF, TNF-a, TNFA, TNFSF2, Cachectin

**Product images:**


Western Analysis of anti-Mouse TNF-alpha.  
Samples were loaded in 15% SDS-polyacrylamide gel under reducing conditions. Lane 1: MWM (kDa). Lane 2: rm TNF-alpha Llane 3: rh TNF-alpha.