



Anti-Rat TNF-alpha

20150223ML



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	104-P11
Size:	100 µg
Lot. No.:	According to product label

Preparation: Produced from sera of rabbits pre-immunized with highly pure recombinant Rat TNF- α . Anti-Rat TNF- α specific antibody was purified by affinity chromatography employing immobilized Rat TNF- α matrix.

Target Background

Synonyms (Target):	Tnf; Tnfa; RATTNF; TNF-alpha
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TNF- α is a pleiotropic pro-inflammatory cytokine secreted by various cells including adipocytes, activated monocytes, macrophages, B cells, T cells and fibroblasts. It belongs to the TNF family of ligands and signals through two receptors, TNFR1 and TNFR2. TNF- α is cytotoxic to a wide variety of tumor cells and is an essential factor in mediating the immune response against bacterial infections. TNF- α also plays a role in the induction of septic shock, auto immune diseases, rheumatoid arthritis, inflammation, and diabetes. Recombinant rat TNF- α is a soluble 17 kDa protein (17.3 kDa) which corresponds to C-terminal extracellular domain of the full length transmembrane protein.

Database References Target

Protein RefSeq:	NP_036807
Uniprot ID:	P16599
mRNA RefSeq:	NM_012675

Product Specifications

Species reactivity	Rat
Clone/Ab feature	Rabbit IgG
Cross reactivity	Rat
Host	Rabbit
Clonality	Polyclonal Antibody
Purification	Antigen-affinity purified
Immunogen	recombinant rat TNF-alpha
Formulation	lyophilized from PBS
Reconstitution buffer	water

Reconstitution: Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

Stability: The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. 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 AND THAW CYCLES!

Applications

Neutralization: To yield one-half maximal inhibition [ND₅₀] of the biological activity of Rat TNF-alpha (2.0 ng/ml), a concentration of 0.145 - 0.165 µg/ml of this antibody is required.

ELISA: To detect Rat TNF-alpha by direct ELISA (using 100 µl/well antibody solution) a concentration of at least 0.5 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of 0.2 - 0.4 ng/well of recombinant Rat TNF-alpha.

Western Blot: To detect Rat TNF-alpha by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant Rat TNF-alpha is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!