

Polyclonal Anti- TNF alpha Picoband™ Antibody

Catalog Number: PB9010

Description

Gene Name	tumor necrosis factor
Recommended Protein Name	Tumor necrosis factor
Lot No.	0901412Da331052
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: rat
Immunogen	E.coli-derived rat TNF alpha recombinant protein (Position: D89-L235). Rat TNF alpha shares 95% amino acid (aa) sequence identity with mouse TNF alpha.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Rat	-

WB: The detection limit for TNF alpha is approximately 1ng/lane under reducing conditions.

Tested Species: In-house tested species with positive results.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB.

Background

TNF α (Tumor Necrosis Factor alpha) gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer. Knockout studies in mice also suggested the neuroprotective function of this cytokine.

Reference

1. Shirai, T., Yamaguchi, H., Ito, H., Todd, C. W., Wallace, R. B. Cloning and expression in Escherichia coli of the gene for human tumour necrosis factor. *Nature* 313: 803-806, 1985.
2. Pennica, D., Nedwin, G. E., Hayflick, J. S., Seeburg, P. H., Derynck, R., Palladino, M. A., Kohr, W. J., Aggarwal, B. B., Goeddel, D. V. Human tumour necrosis factor: precursor structure, expression and homology to lymphotoxin. *Nature* 312: 724-729, 1984.