

Product datasheet for R1590P

OriGene Technologies, Inc.

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Tumor necrosis factor (TNF-alpha) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, FN, IHC, IP, R, WB

Recommended Dilution: Western Blot: Use HRP Goat-anti-Rabbit IgG [H&L] (code R1364HRP) and TMB as a substrate.

A working dilution range of 1/500 to 1/2,000 is suggested for this application to detect TNF-alpha from supernatants or lysates of 2 x 10^6 endotoxin-stimulated mouse peripheral blood mononuclear cells (PBMC). PBMC are stimulated for 24 hours with 1% (v/v) Mouse serum plus

10 ng/mL E.coli LPS.

Immunohistochemistry: A dilution range of 1/400 is suggested for this immunoassay. Either paraffin fixation or cryofixation can be used for immunohistochemistry using a

dilution of 1/200 for staining of TNF-alpha.

Immunoprecipitation: A dilution range of 1/400 to 1/800 is suggested for this immunoassay.

Pre-clearing with a non-specific Rabbit IgG is helpful to reduce background.

ELISA: Using HRP Conjugated Anti-Rabbit IgG [H&L] (Goat) (code R1364HRP) and ABTS as a substrate for 30 minutes at room temperature. A working dilution range of 1/1,000-1/5,000 is suggested for this product. For use in ELISA formats, this antibody is best used as the second

antibody in combination with a monoclonal antibody as a capture antibody. **Radioimmunoassay:** A dilution of 1/8,000 is suggested for this immunoassay.

For **Neutralization**, it is recommended to incubate the sample with a 1/200 dilution of the antibody for at least 4 hours before being tested. A control of similarly diluted normal Rabbit

IgG is recommended.

Reactivity: Mouse
Host: Rabbit
Clonality: Polyclonal

Immunogen: Recombinant Mouse TNF-alpha produced in E.coli.

Specificity: The antibody is directed against mature 17,000 MW Mouse TNF-alpha.

It does not recognize Mouse TNF-beta (lymphotoxin). This antibody will recognize the cell-bound precursor of TNF-alpha as a 26,000 protein in immunoblots, particularly in denatured

samples.

Also useful for Neutralization of Mouse activity in bioassays. It doesnot neutralize the

biological activity of lymphotoxin.





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Formulation: 0.02M Potassium Phosphate, 0.15M Sodium Chloride, pH 7.2

State: Purified

State: Liquid (sterile filtered) purified IgG fraction.

Stabilizer: None

Preservative: 0.01% (w/v) Sodium Azide

Concentration: lot specific

Purification: Selective salt precipitation

Conjugation: Unconjugated

Storage: Store vial at -20°C prior to opening.

Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20°C

or below.

Avoid cycles of freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: tumor necrosis factor

Database Link: Entrez Gene 21926 Mouse

P06804

Background: Tumor Necrosis Factor Alpha (TNF alpha) is a protein secreted by lipopolysaccharide

stimulated macrophages, and causes tumor necrosis when injected into tumour bearing mice. TNF alpha is believed to mediate pathogenic shock and tissue injury associated with endotoxemia. TNF alpha exists as a multimer of two, three, or five noncovalently linked units, but shows a single 17 kDa band following SDS PAGE under non reducing conditions. TNF alpha is closely related to the 25 kDa protein Tumour Necrosis Factor beta (lymphotoxin), sharing the same receptors and cellular actions. TNF alpha causes cytolysis or cytostasis of certain transformed cells, being synergistic with interferon gamma in its cytotoxicity. Although it has little effect on many cultured normal human cells, TNF alpha appears to be directly toxic to vascular endothelial cells. Other actions of TNF alpha include stimulating growth of human fibroblasts and other cell lines, activating polymorphonuclear neutrophils and osteoclasts, and induction of interleukin 1, prostaglandin E2 and collagenase production. TNF alpha is currently being evaluated in treatment of certain cancers and AIDS Related Complex.

Synonyms: TNF, TNF-a, TNFA, TNFSF2, Cachectin