

## Anti-Human TNF alpha (RABBIT) Antibody - 109-401-306

Code: 109-401-306 Size: 1 mL

Product Description: Anti-Human TNF alpha (RABBIT) Antibody - 109-401-306

Concentration: 75 mg/mL by Refractometry

PhysicalState: Liquid (sterile filtered)

Label Unconjugated

Host Rabbit

**Gene Name TNFA** 

**Species Reactivity** human, primate

Buffer None

Stabilizer None

**Storage Condition** Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage.

Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to

immediate use.

**Synonyms** APC1 antibody, Cachectin antibody, DIF antibody, Differentiation inducing factor antibody, Macrophage

cytotoxic factor antibody, MCF antibody, Necrosin antibody, Tumour Necrosis Factor Alpha antibody

**Application Note** Anti-Human TNFa has been tested for use in ELISA, immunohistochemistry and immunoblotting. It recognizes

the 17,000 MW TNFa. Reactivity in other immunoassays is unknown.

**Background** 

Anti TNF alpha Antibody recognizes TNF alpha (TNF, cachexin, cachectin, tumor necrosis factor-alpha or TNF-a) a cytokine involved in systemic inflammation. TNF alpha is a member of a group of cytokines that stimulate the acute phase reaction. It is produced chiefly by activated macrophages, although it can be produced by other cell types as well. The primary role of TNF alpha is in the regulation of immune cells. TNFis an endogenous pyrogen that is able to induce fever, apoptotic cell death, sepsis (through IL-1 & IL-6 production), cachexia, inflammation, and to inhibit tumorigenesis and viral replication. Dysregulation of TNF production has been implicated in a variety of human diseases, including Alzheimer's disease, cancer, major depression, and

inflammatory bowel disease (IBD).

**Purity And Specificity** This antiserum has been heated to 56°C for 30 minutes. The antiserum is directed against mature 17,000 MW

human TNFa and is useful in determining its presence in various assays. In general, this antibody also detects primate TNFa in the same formats using similar dilutions. The antibody does not recognize human TNGb (lymphotoxin). This antiserum will recognize the cell-bound precursor of TNFa as a 26,000 protein in immunoblots, particularly in denatured samples. This antibody is also useful for neutralization of human and primate TNFa activity in bioassays. It does not neutralize the biological activity of lymphotoxin. 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.

**Assay Dilutions** User Optimized

**ELISA** 1:1,000 - 1:5,000

1:100 - 1:500 Immunohistochemistry

**WESTERN BLOT** 1:500 - 1:2.000

IHC 1:100 - 1:500

**OTHER ASSAYS** User Optimized

Expiration date is one (1) year from date of opening. **Expiration** 

Immunogen The whole rabbit serum was prepared by repeated immunizations with recombinant human TNFa produced in

E.coli.

**Related Products** 

009-001-306 TNF-a Human Recombinant Protein - 009-001-306

010-001-321 TNF-a Mouse Recombinant Protein - 010-001-321(1)

100-401-266 Anti-NFKB p65 (Rel A) pS529 (RABBIT) Antibody - 100-401-266

Anti-NFKB p65 (Rel A) (RABBIT) Antibody - 100-4165 100-4165

## **Related Links**

**NCBI** http://www.ncbi.nlm.nih.gov/protein/P01375.1

NCBI - P01375.1 http://www.ncbi.nlm.nih.gov/protein/P01375.1

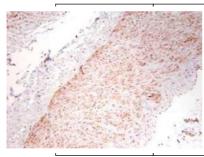
UniProt - P01375 http://www.uniprot.org/uniprot/P01375

Gene ID - 7124 http://www.ncbi.nlm.nih.gov/gene/7124

## **Images**

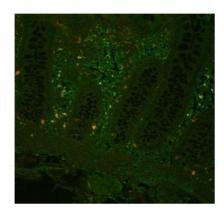
1

Immunohistochemistry using Rockland's polyclonal TNFa antibody showing staining of formalin/PFA-fixed paraffin-embedded sections of human artery tissue sections. Sections were fixed in formaldehyde and subjected to heat mediated antigen retrieval in citrate buffer (pH 6.0). Slides were blocked for ten minutes with 1.5% serum. Primary antibody was diluted 1:100 and incubated with samples for 24 hours at 4°C. HRP-conjugated goat anti-rabbit antibody was used as the secondary antibody.



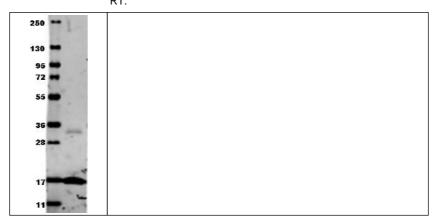
2

Fluorescent immunohistochemistry showing staining of human colon by Rockland's anti-TNF alpha (formalin/PFA-fixed paraffinembedded sections). Samples were formaldehyde-fixed, then blocked in 10% serum for 2 hours at 20°C. The primary antibody was diluted 1:100 and incubated with the sample for 2 hours at 20°C. Alexa Fluor® 680 goat polyclonal secondary antibody was used diluted 1:5000.

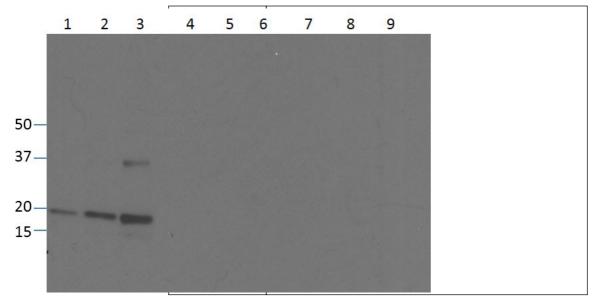


3

Western blot using Rockland's Anti-Human TNF-a (RABBIT) Antibody. Membrane blocked in 1% BSA-TBS-T 30 min RT, Rb-a-TNF alpha added at 1:1000 in 1% BSA-TBS-T o/n 4°C, DyLight 649 Gt-a-Rb 611-143-122 added at 1:20,000 in MB-070 30 min RT.



Western blot of Anti-Human TNF-a (RABBIT) Antibody. Lane 1: 250ng human recombinant TNF. Lane 2: 500ng human recombinant TNF. Lane 3: 1000ng human recombinant TNF. Membrane blocked in Blotto p/n B501-0500 for 30 min RT.Primary antibody: Rb-a-TNF alpha added at 1:1000 in overnight at 4°C, Gt-a-Rb HRP p/n 611-103-122 added at 1:20,000 in 5% Blotto for 30 min RT.



## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.