

Anti-Human TNF- (RABBIT) Antibody - 209-401-306

Code: 209-401-306

Size: 1 mg

Product Description: Anti-Human TNF- (RABBIT) Antibody - 209-401-306

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	TNFA
Species Reactivity	human
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	None
Storage Condition	Store anti-TNF alpha 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	rabbit anti-TNF alpha Antibody, rabbit anti-TNFa Antibody, rabbit anti-tumor necrosis factor alpha antibody, APC1 antibody, Cachectin antibody, DIF antibody, Differentiation inducing factor antibody, Macrophage cytotoxic factor antibody, MCF antibody, Necrosin antibody
Application Note	Anti-TNF alpha antibody has been tested in WB, ELISA, IF, and IHC. Expect a band in appropriate lysates at ~25.6kDa. This antibody is also useful for neutralization of human and primate TNF activity in bioassays diluted at 1:200. The antibody does not recognize human TNF beta (lymphotoxin). Specific conditions for reactivity and signal detection should be optimized by the end user.
Background	Anti TNF alpha Antibody recognizes TNF alpha (TNF, cachexin, cachectin, tumor necrosis factor-alpha or TNF-) 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. TNF is 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). Anti-TNF alpha Antibody is useful for researches interested in TNF/TNFR pathways, apoptosis signaling pathways, and cell proliferation.
Purity And Specificity	This antibody is primarily directed against mature 17,000 MW human TNF and is useful in determining its presence in various assays. In general, this antibody also detects primate TNF in the same formats using similar dilutions. The antibody does not recognize human TNFβ (lymphotoxin). This IgG fraction antibody will recognize the cell-bound precursor of TNF as a 26,000 protein in immunoblots, particularly in denatured samples. This antibody is also useful for neutralization of human and primate TNF 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
Western Blot	1:500 - 1:2,000
Immunohistochemistry	1:100 - 1:500
IF Microscopy	User Optimized
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	TNF alpha antibody used to produce this IgG fraction antibody was prepared by repeated immunizations with recombinant human TNF.
General Reference	Cseh, K. and B. Beutler (1989) Alternative cleavage of the cachectin/tumor necrosis factor propeptide results in a larger, inactive form of secreted protein. J Biol Chem 264 (27): 16256-60.

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)
214-401-306S	Anti-Swine TNFa (RABBIT) Antibody - 214-401-306S
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302

Related Links

UniProtKB - P01375

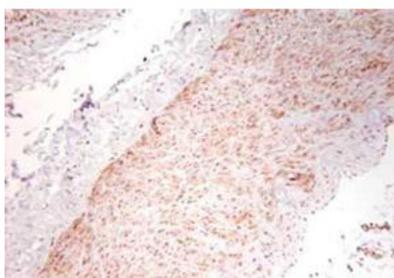
<http://www.uniprot.org/uniprot/P01375>

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

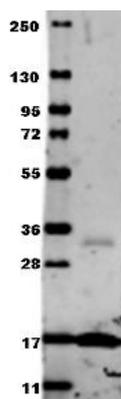
GenEID - 7124

Images

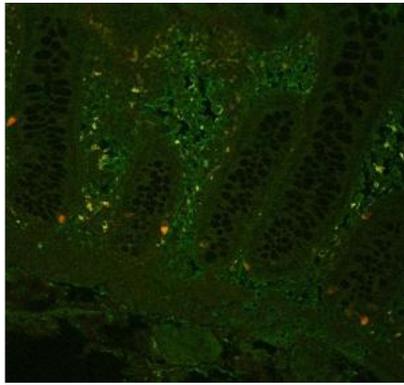
- 1 Immunohistochemistry using Rockland's polyclonal TNFa antibody showing staining of formalin/PFA-fixed paraffin-embedded sections of human artery tissue sections. Sections were fixed in formaldehyde and subjected to heat mediated antigen retrieval in citrate buffer (pH 6.0). Slides were blocked for 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 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.

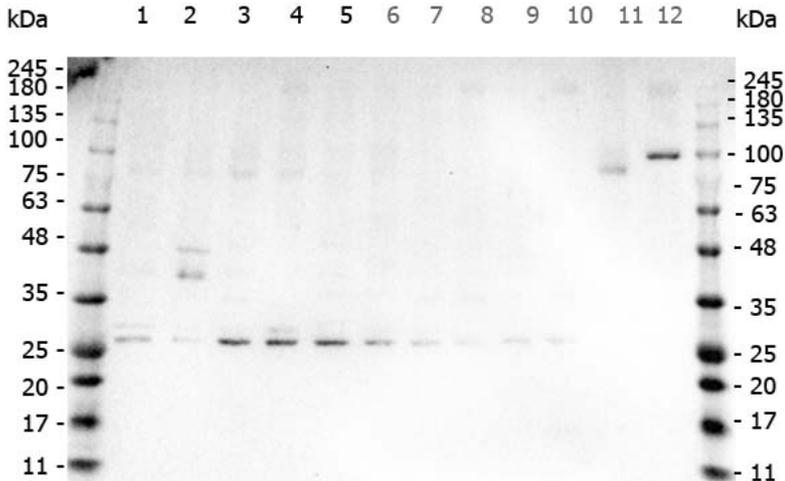


- 3 Fluorescent immunohistochemistry showing staining of human colon by Rockland's anti-TNF alpha (formalin/PFA-fixed paraffin-embedded sections). Samples were formaldehyde-fixed, then blocked in 10% serum for 2 hours at 20°C. The primary antibody was diluted 1:100 and incubated with the sample for 2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



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Western Blot of Rabbit anti-TNF Alpha antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: HEK293 lysate (p/n W09-000-365). Lane 2: HeLa Lysate (p/n W09-000-363). Lane 3: MCF-7 Lysate (p/n W09-000-360). Lane 4: Jurkat Lysate (p/n W09-000-370). Lane 5: A431 Lysate (p/n W09-000-361). Lane 6: A549 Lysate (p/n W09-001-372). Lane 7: LNCap Lysate (p/n W09-001-GJ9). Lane 8: MOLT-4 Lysate (p/n W09-001-GK2). Lane 9: Ramos Lysate (p/n W09-000-GK4). Lane 10: Raji Lysate (p/n W09-001-368). Lane 11: A-172 Lysate (p/n W09-001-GL5). Lane 12: NIH/3T3 Lysate (p/n W10-000-358). Load: 35 µg per lane. Primary antibody: TNF Alpha antibody at 1ug/mL overnight at 4C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:30,000 for 60 min at RT. Blocking Buffer: 1% Casein-TTBS for 30 min at RT. Predicted/Observed size: 26kDa for TNF Alpha.



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.