

Datasheet for ABIN3023860 **anti-TNF alpha antibody**



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1 Publication

Overview

Quantity:	100 µg
Target:	TNF alpha
Reactivity:	Human, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TNF alpha antibody is un-conjugated
Application:	Flow Cytometry (FACS), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Recombinant full-length human protein was used as the immunogen for the TNF-alpha antibody.
Clone:	TNFA-1172
Isotype:	IgM kappa
Characteristics:	This mAb recognizes human 17-26 kDa protein, which is identified as cytokine TNF-alpha (Tumor Necrosis Factor-alpha). TNF-alpha can be expressed as a 17 kDa free molecule, or as a 26 kDa membrane protein. TNF-alpha is a protein secreted by lipopolysaccharide-stimulated macrophages, and causes tumor necrosis when injected into tumor bearing mice. TNF alpha causes cytolysis 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

Product Details

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.

Purification: PEG precipitation

Target Details

Target: TNF alpha

Alternative Name: TNF-alpha ([TNF alpha Products](#))

Background: This mAb recognizes human 17-26 kDa protein, which is identified as cytokine TNF-alpha (Tumor Necrosis Factor-alpha). TNF-alpha can be expressed as a 17 kDa free molecule, or as a 26 kDa membrane protein. TNF-alpha is a protein secreted by lipopolysaccharide-stimulated macrophages, and causes tumor necrosis when injected into tumor bearing mice. TNF alpha causes cytolysis 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.

Pathways: [NF-kappaB Signaling](#), [Apoptosis](#), [Caspase Cascade in Apoptosis](#), [TLR Signaling](#), [Cellular Response to Molecule of Bacterial Origin](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#), [Positive Regulation of Endopeptidase Activity](#), [Hepatitis C](#), [Protein targeting to Nucleus](#), [Inflammasome](#)

Application Details

Application Notes: Optimal dilution of the TNF-alpha antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.\. Flow Cytometry: 0.5-1 µg/million cells in 0.1ml,Immunofluorescence: 1-2 µg/mL,Immunohistochemistry (FFPE): 2-4 µg/mL for 30 min at RT (1),Prediluted format:

Application Details

incubate for 30 min at RT (2)

Restrictions: For Research Use only

Handling

Concentration: 1 mg/mL

Buffer: 1 mg/mL in 1X PBS, BSA free, sodium azide free

Preservative: Azide free

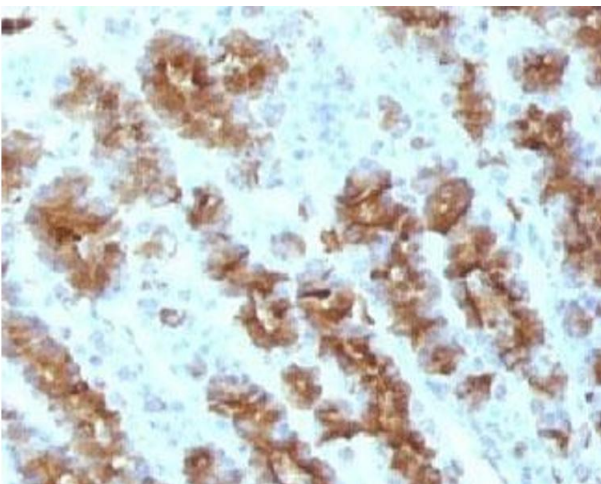
Storage: 4 °C,-20 °C

Storage Comment: Store the TNF-alpha antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).

Publications

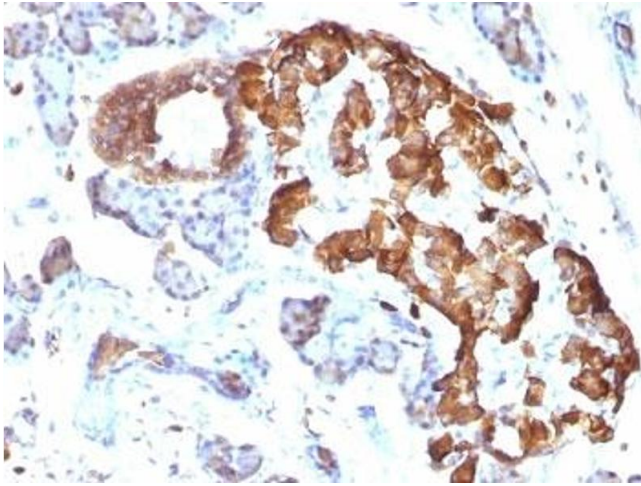
Product cited in: Prasetyo, Sampoerno, Juniarti, Cahyani, Saraswati, Kuntjoro, Tjendronegoro: "Effect of Lipopolysaccharide-Induced Apical Periodontitis in Diabetes Mellitus Rats on Periapical Inflammation." in: **European journal of dentistry**, (2023) ([PubMed](#)).

Images



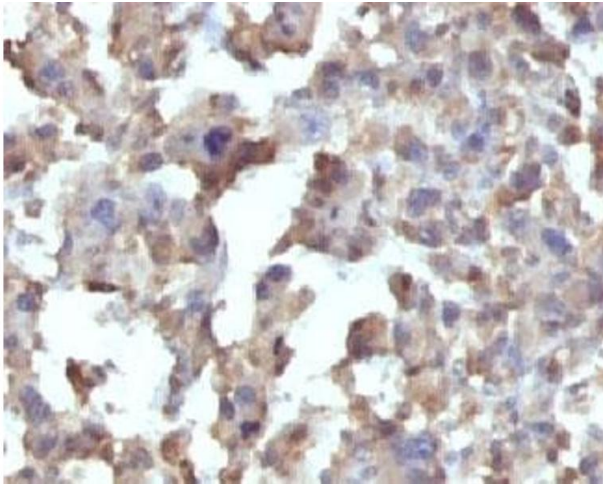
Immunohistochemistry (Formalin-fixed Paraffin-embedded Sections)

Image 1. Formalin-fixed, paraffin-embedded rat stomach stained with TNF alpha antibody.



Immunohistochemistry (Formalin-fixed Paraffin-embedded Sections)

Image 2. Formalin-fixed, paraffin-embedded rat pancreas stained with TNF alpha antibody.



Immunohistochemistry (Formalin-fixed Paraffin-embedded Sections)

Image 3. Formalin-fixed, paraffin-embedded human Histiocytoma stained with TNF alpha antibody (TNFA/1172)