

Datasheet for ABIN677318

**anti-TNF alpha antibody (AA 181-235)**[Go to Product page](#)**1** Validation**6** Images**21** Publications

## Overview

Quantity:	100 µL
Target:	TNF alpha
Binding Specificity:	AA 181-235
Reactivity:	Human, Mouse, Rat, Rabbit, Horse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TNF alpha antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

## Product Details

Immunogen:	KLH conjugated synthetic peptide derived from mouse TNF-alpha
Isotype:	IgG
Cross-Reactivity:	Horse, Human, Mouse, Rabbit, Rat
Purification:	Purified by Protein A.

## Target Details

Target:	TNF alpha
Alternative Name:	TNF alpha ( <a href="#">TNF alpha Products</a> )

## Target Details

Background:	<p>Synonyms: DIF, Tnfa, TNF-a, TNFSF2, Tnfsf1a, TNFalpha, TNF-alpha, Tumor necrosis factor, Cachectin, Tumor necrosis factor ligand superfamily member 2, Tnf</p> <p>Background: Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation. The TNF intracellular domain (ICD) form induces IL12 production in dendritic cells.</p>
Gene ID:	21926
UniProt:	<a href="#">P06804</a>
Pathways:	<a href="#">NF-kappaB Signaling</a> , <a href="#">Apoptosis</a> , <a href="#">Caspase Cascade in Apoptosis</a> , <a href="#">TLR Signaling</a> , <a href="#">Cellular Response to Molecule of Bacterial Origin</a> , <a href="#">Regulation of Leukocyte Mediated Immunity</a> , <a href="#">Positive Regulation of Immune Effector Process</a> , <a href="#">Production of Molecular Mediator of Immune Response</a> , <a href="#">Positive Regulation of Endopeptidase Activity</a> , <a href="#">Hepatitis C</a> , <a href="#">Protein targeting to Nucleus</a> , <a href="#">Inflammasome</a>

## Application Details

Application Notes:	<p>WB 1:300-5000</p> <p>ELISA 1:500-1000</p> <p>IHC-P 1:200-400</p> <p>IHC-F 1:100-500</p> <p>IF(IHC-P) 1:50-200</p> <p>IF(IHC-F) 1:50-200</p>
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Restrictions:	For Research Use only
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## Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

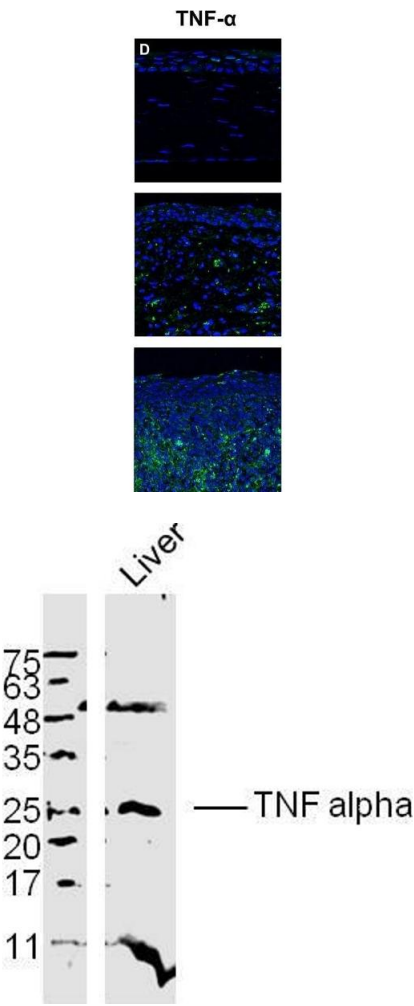
## Handling

Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

## Publications

- Product cited in:
- Maier, Reichhart, Gonnermann, Kociok, Riechardt, Gundlach, Strauß, Joussen: "Effects of TNF $\alpha$  receptor TNF-Rp55- or TNF-Rp75- deficiency on corneal neovascularization and lymphangiogenesis in the mouse." in: **PLoS ONE**, Vol. 16, Issue 4, pp. e0245143, (2021) ([PubMed](#)).
- Mousa, Soliman, Alhumaydhi, Almatroudi, Al Rugaie, Allemailem, Alrumaihi, Khan, Rezk, Aljasir, Alwashmi, Aba Alkhayl, Albutti, Seleem: "Garlic Extract Alleviates Trastuzumab-Induced Hepatotoxicity in Rats Through Its Antioxidant, Anti-Inflammatory, and Antihyperlipidemic Effects." in: **Journal of inflammation research**, Vol. 14, pp. 6305-6316, (2021) ([PubMed](#)).
- Lennikov, Mirabelli, Mukwaya, Schappner, Thangavelu, Lachota, Ali, Jensen, Lagali: "Selective IKK2 inhibitor IMD0354 disrupts NF- $\kappa$ B signaling to suppress corneal inflammation and angiogenesis." in: **Angiogenesis**, Vol. 21, Issue 2, pp. 267-285, (2019) ([PubMed](#)).
- Han, Wang, Qin, Xia, Wu: "LPS alters the immuno-phenotype of glioma and glioma stem-like cells and induces in vivo antitumor immunity via TLR4." in: **Journal of experimental & clinical cancer research : CR**, Vol. 36, Issue 1, pp. 83, (2018) ([PubMed](#)).
- Wang, Tang, Shen, Chen, Chen, Luo, Ge: "Hepatocyte growth factor (HGF) optimizes oral traumatic ulcer healing of mice by reducing inflammation." in: **Cytokine**, Vol. 99, pp. 275-280, (2018) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)

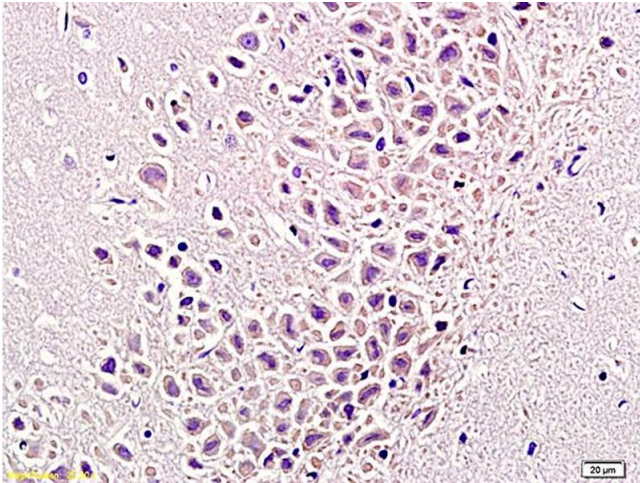


### Immunohistochemistry

**Image 1.** Histology and immunofluorescence in rat corneal sections. a Hematoxylin and Eosin (H&E), b VEGF-A (green), c CCL2 (green), d TNF-α (green), e CXCL5 (green), f CD45 (green) and g HIF-1α (green) staining in rat cornea tissue. Nuclear counterstaining by DAPI (blue) in fluorescent images - figure provided by CiteAb. Source: PMID29332242

### Western Blotting

**Image 2.** Mouse liver lysates probed with TNF alpha Polyclonal Antibody, unconjugated at 1:300 overnight at 4°C followed by a conjugated secondary antibody at 1:10000 for 90 minutes at 37°C.



### Immunohistochemistry

**Image 3.** Formalin-fixed and paraffin embedded rat hippocampus labeled with Rabbit Anti-TNF alpha Polyclonal Antibody (ABIN677318) at 1:200 followed by conjugation to the secondary antibody and DAB staining.

Please check the [product details page](#) for more images. Overall 6 images are available for ABIN677318.



## Successfully validated (Immunofluorescence (IF))

by [Confocal Imaging Core, Beth Israel Deaconess Medical Center](#)

Report Number: 029732

Date: Jun 12 2014

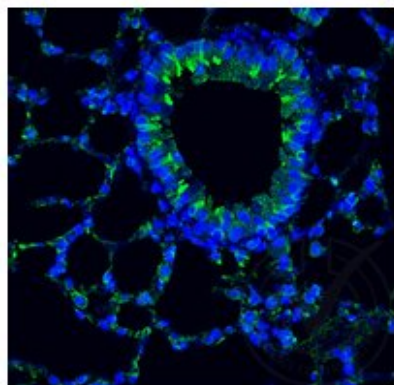
Lot Number:	140113
Method validated:	Immunofluorescence (IF)
Positive Control:	<a href="#">Normal mouse lung tissue</a>
Negative Control:	<a href="#">Normal mouse adipose tissue</a>
Notes:	Fluorescent signal is detected in positive control, but not in negative control or isotype controls.
Primary Antibody:	- Antibody: Tumor Necrosis Factor (TNF) - Catalog number: ABIN677318 - Supplier: Bioss - Supplier catalog number: bs-2081R - Lot number: 140113
Secondary Antibody:	- Antibody: Donkey anti-Rabbit IgG (Heavy & Light Chain) Antibody (Alexa 647) - Catalog number: 711-605-152 - Supplier: Jackson Immuno Research - Lot number: Not available
Isotype:	- Antibody: Rabbit IgG Isotype - Supplier: Bioss - Supplier catalog number: bs-0295p - Lot number: not available
Controls:	<ul style="list-style-type: none"> <li>• Positive control: FFPE normal mouse lung tissue</li> <li>• Negative Control: FFPE normal mouse fat tissue</li> <li>• Isotype antibody control: tissue sections treated with Rabbit IgG Isotype at 1ug/ul</li> <li>• Secondary antibody only control: positive and negative control tissue sections treated with Goat anti-Rabbit Alexa 647 secondary antibody only. Any staining observed is due to non-specific binding of secondary antibody.</li> </ul>
Protocol:	<ul style="list-style-type: none"> <li>• Paraffin embedded positive and negative control tissue sections were deparaffinized and underwent antigen retrieval using 10 mM sodium citrate pH 6.0 in a pressure cooker for 10 min.</li> <li>• The tissue sections were incubated with 1 mg/mL sodium borohydride for 10 min at room temperature to block autofluorescent background signal. The sections were then rinsed three times in TBS for 5 min each at RT.</li> <li>• Tissue sections were blocked in 1 X TBS / 5% normal donkey serum for 60 min at RT.</li> <li>• Tissue sections were incubated with primary antibody diluted 1:200 in 1X PBS / 5% normal donkey serum overnight at 4°C.</li> <li>• Tissue sections were rinsed three times in TBS for 5 min each at RT.</li> <li>• Cells were incubated with secondary antibody diluted 1:200 in 1X PBS / 5% normal donkey</li> </ul>

serum for 60 min at RT in dark.

- Tissue sections were rinsed three times in TBS for 5 min each at RT.
- Coverslips were mounted on slides with Prolong Gold anti-fade mounting media (Invitrogen).
- IF stained tissue sections were imaged with a Zeiss LSM 510 Meta confocal microscope.

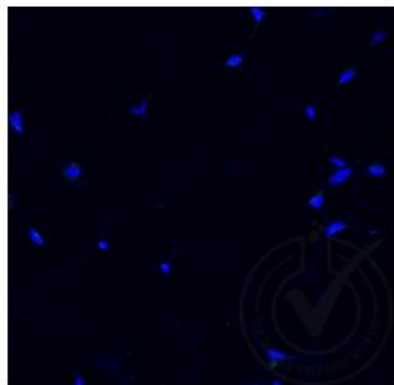
Experimental Notes: Nothing to note.

## Images for Validation report #029732



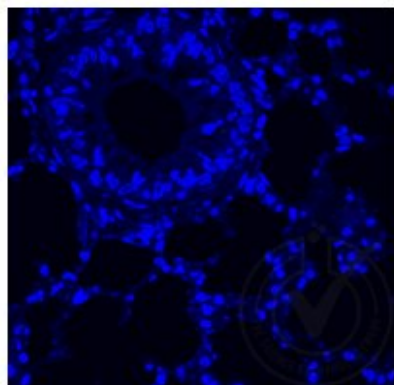
**Validation image no. 1 for anti-Tumor Necrosis Factor alpha (TNF alpha) (AA 181-235) antibody (ABIN677318)**

Panel 1: confocal image of positive control (mouse lung) with anti-TNF alpha antibody



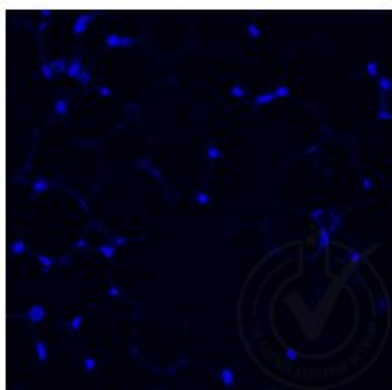
**Validation image no. 2 for anti-Tumor Necrosis Factor alpha (TNF alpha) (AA 181-235) antibody (ABIN677318)**

Panel 2: confocal image of negative control (mouse adipose) with anti-TNF alpha antibody



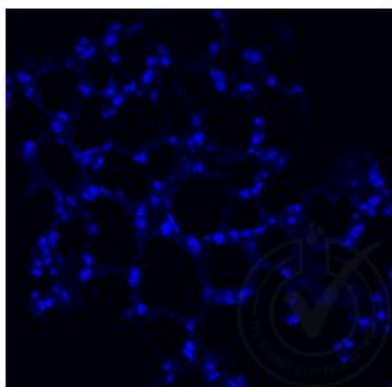
**Validation image no. 3 for anti-Tumor Necrosis Factor alpha (TNF alpha) (AA 181-235) antibody (ABIN677318)**

Panel 3: confocal image of positive control (mouse lung) with isotype control



**Validation image no. 4 for anti-Tumor Necrosis Factor alpha (TNF alpha) (AA 181-235) antibody (ABIN677318)**

Panel 4: confocal image of negative control (mouse adipose) with isotype control



**Validation image no. 5 for anti-Tumor Necrosis Factor alpha (TNF alpha) (AA 181-235) antibody (ABIN677318)**

Panel 5: confocal image of positive control (mouse lung) with secondary antibody only