Datasheet for ABIN677318

**anti-TNF alpha antibody (AA 181-235)**

**Overview**

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

**Product Details**

<table>
<thead>
<tr>
<th>Immunogen:</th>
<th>KLH conjugated synthetic peptide derived from mouse TNF-alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isotype:</td>
<td>IgG</td>
</tr>
<tr>
<td>Purification:</td>
<td>Purified by Protein A.</td>
</tr>
</tbody>
</table>

**Target Details**

| Target: | TNF alpha |
| Alternative Name: | TNF alpha (TNF alpha Products) |
| Background: | Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFRBR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing |
Target Details

- 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.
- Subcellular location: Secreted, Cell membrane
- Synonyms: DIF, Tnfa, TNF-a, TNFSF2, Tnfsf1a, TNFalpha, TNF-alpha, Tumor necrosis factor, Cachectin, Tumor necrosis factor ligand superfamily member 2, Tnf

Gene ID: 21926
UniProt: P06804
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: WB 1:300-5000
  ELISA 1:500-1000
  IHC-P 1:200-400
  IHC-F 1:100-500
  IF(IHC-P) 1:50-200
  IF(IHC-F) 1:50-200

- Restrictions: For Research Use only

Handling

- Format: Liquid
- Concentration: 1 μg/μL
- Buffer: 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % 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.
- Storage: -20 °C
Handling

Storage Comment: Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

Publications


There are more publications referencing this product on: Product page

Images

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.
# Validation report #029732 for Immunofluorescence (IF)

Successfully validated **(Immunofluorescence (IF))**

by **Confocal Imaging Core, Beth Israel Deaconess Medical Center**

Report Number: 029732

Date: Jun 12 2014

<table>
<thead>
<tr>
<th>Lot Number:</th>
<th>140113</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method validated:</td>
<td>Immunofluorescence (IF)</td>
</tr>
<tr>
<td>Positive Control:</td>
<td>Normal mouse lung tissue</td>
</tr>
<tr>
<td>Negative Control:</td>
<td>Normal mouse adipose tissue</td>
</tr>
</tbody>
</table>

**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:**
- Positive control: FFPE normal mouse lung tissue
- Negative Control: FFPE normal mouse fat tissue
- Isotype antibody control: tissue sections treated with Rabbit IgG Isotype at 1ug/ul
- 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.

**Protocol:**
- 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.
- 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.
- Tissue sections were blocked in 1 X TBS / 5% normal donkey serum for 60 min at RT.
- Tissue sections were incubated with primary antibody diluted 1:200 in 1X PBS / 5% normal donkey serum overnight at 4°C.
- Tissue sections were rinsed three times in TBS for 5 min each at RT.
- Cells were incubated with secondary antibody diluted 1:200 in 1X PBS / 5% normal donkey
Validation report #029732 for Immunofluorescence (IF)

- 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