Datasheet for ABIN6940753

anti-TNF alpha antibody

Overview

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

Product Details

Immunogen: Recombinant full-length human TNF-alpha protein
Clone: TNFA-1172
Isotype: IgM kappa
Specificity: 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.
### Product Details

TNF alpha is currently being evaluated in treatment of certain cancers and AIDS Related Complex.

### Target Details

<table>
<thead>
<tr>
<th>Target</th>
<th>TNF alpha</th>
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</thead>
<tbody>
<tr>
<td>Alternative Name:</td>
<td>TNF (TNF alpha Products)</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>17kDa</td>
</tr>
<tr>
<td>Gene ID:</td>
<td>7124</td>
</tr>
<tr>
<td>UniProt:</td>
<td>P01375</td>
</tr>
<tr>
<td>Pathways:</td>
<td>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</td>
</tr>
</tbody>
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### Application Details

**Application Notes:**
Positive Control: HeLa, HepG2, HL-60 or A431 cells. Pancreas or Histiocytoma.
Known Application: Flow Cytometry (0.5-1 μg/million cells), Immunofluorescence (1-2 μg/mL), Immunohistochemistry (Formalin-fixed) (2-4 μg/mL for 30 min at RT)(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 minutes)Optimal dilution for a specific application should be determined.

**Restrictions:**
For Research Use only

### Handling

**Concentration:**
200 μg/mL

**Buffer:**
10 mM PBS with 0.05 % BSA & 0.05 % azide.

**Preservative:**
Sodium azide

**Precaution of Use:**
This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

**Storage:**
4 °C,-80 °C
Handling

Storage Comment: Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Expiry Date: 24 months

Publications


Images

Immunostaining

Image 1. The effects of ustekinumab and the CUC on the immunoexpression (IE) of TNF-α in IQ-induced psoriatic skin lesions. The skin of G1 exhibits standard IE of TNF-α compared to its marked IE in the epidermis (EP) of G2. In contrast, the skin lesions of G4 reveal the improvement of TNF-α IE more than in G3. TNF-α immunostaining, 100×, bar = 200 μm. Histogram (H) expresses the M ± SD of TNF-α IE in all groups. *p < 0.05 vs. G1 and G4, and #p < 0.05 vs. G2 and G3. Source: PMID34749565

Flow Cytometry

Image 2. Flow Cytometric Analysis of PFA-fixed HePG2 cells using TNF alpha Mouse Monoclonal Antibody (TNFA/1172) followed by Goat anti- Mouse- IgG-CF488 (Blue), Isotype Control (Red).
Immunohistochemistry

**Image 3.** Formalin-fixed, paraffin-embedded human Erdheim-Chester disease (also known as polyostotic sclerosing histiocytosis) stained with TNF alpha Mouse Monoclonal Antibody (TNFA/1172).

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN6940753.