

## IL-1 alpha Antibody

Rabbit Polyclonal Antibody Catalog # ABV10844

# **Specification**

## IL-1 alpha Antibody - Product Information

Application WB
Primary Accession P01583
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 30607

# IL-1 alpha Antibody - Additional Information

**Gene ID 3552** 

Application & Usage Western blot analysis (0.5-2 μg/ml). Per

researcher's feedback, it can also be used in neutralization (5-10  $\mu g/ml$ ). However, the optimal conditions should be determined individually. Recombinant human IL-1 $\alpha$  can be used as a positive

control.

**Other Names** 

IL-1, IL1, IL 1, Interluekin-1 alpha, Interluekin 1 alpha, interluekin

**Target/Specificity** 

IL-1a

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

#### **Formulation**

100  $\mu g$  (0.5 mg/ml) affinity purified rabbit anti-human IL-1 $\alpha$  polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

### **Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 



#### **Precautions**

IL-1 alpha Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## IL-1 alpha Antibody - Protein Information

### Name IL1A

### Synonyms IL1F1

#### **Function**

Cytokine constitutively present intracellularly in nearly all resting non-hematopoietic cells that plays an important role in inflammation and bridges the innate and adaptive immune systems (PubMed:<a href="http://www.uniprot.org/citations/26439902" target="\_blank">26439902</a>). After binding to its receptor IL1R1 together with its accessory protein IL1RAP, forms the high affinity interleukin-1 receptor complex (PubMed:<a

href="http://www.uniprot.org/citations/2950091" target="\_blank">2950091</a>, PubMed:<a href="http://www.uniprot.org/citations/17507369" target="\_blank">17507369</a>). Signaling involves the recruitment of adapter molecules such as MYD88, IRAK1 or IRAK4 (PubMed:<a href="http://www.uniprot.org/citations/17507369" target="\_blank">17507369</a>). In turn, mediates the activation of NF-kappa-B and the three MAPK pathways p38, p42/p44 and JNK pathways (PubMed:<a href="http://www.uniprot.org/citations/14687581"

target="\_blank">14687581</a>). Within the cell, acts as an alarmin and cell death results in its liberation in the extracellular space after disruption of the cell membrane to induce inflammation and alert the host to injury or damage (PubMed:<a

href="http://www.uniprot.org/citations/15679580" target="\_blank">15679580</a>). In addition to its role as a danger signal, which occurs when the cytokine is passively released by cell necrosis, directly senses DNA damage and acts as a signal for genotoxic stress without loss of cell integrity (PubMed:<a href="http://www.uniprot.org/citations/26439902" target="\_blank">26439902</a>).

#### **Cellular Location**

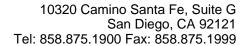
Nucleus. Cytoplasm. Secreted Note=The lack of a specific hydrophobic segment in the precursor sequence suggests that IL-1 is released by damaged cells or is secreted by a mechanism differing from that used for other secretory proteins The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum-Golgi intermediate compartment) followed by vesicle entry and secretion (PubMed:32272059) Recruited to DNA damage sites and secreted after genotoxic stress

# **IL-1 alpha Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# IL-1 alpha Antibody - Images





# IL-1 alpha Antibody - Background

IL-1 $\alpha$  is a potent immuno-modulator that mediates a wide range of immune and inflammatory responses. Human IL-1 $\alpha$  is an 18.0 kDa protein containing 159 amino acid residues.