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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 µg/ml). However, the optimal conditions should be determined individually. Recombinant human IL-1α 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 µg (0.5 mg/ml) affinity purified rabbit anti-human IL-1α 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:26439902). After binding to its receptor IL1R1 together with its accessory protein IL1RAP, forms the high affinity interleukin-1 receptor complex (PubMed:17507369, PubMed:2950091). Signaling involves the recruitment of adapter molecules such as MYD88, IRAK1 or IRAK4 (PubMed:17507369). In turn, mediates the activation of NF-kappa-B and the three MAPK pathways p38, p42/p44 and JNK pathways (PubMed:14687581). 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:15679580). 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:26439902).

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

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IL-1 alpha Antibody - Background

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