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# IL1A-S87 Antibody
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP6860a**

## Specification

### IL1A-S87 Antibody - Product Information

| | |
|---|---|
| Application | **WB,E** |
| Primary Accession | P01583 |
| Other Accession | P79340 |
| Reactivity | **Human** |
| Predicted | **Monkey** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **30607** |
| Antigen Region | **65-94** |

### IL1A-S87 Antibody - Additional Information

**Gene ID** 3552

**Other Names**
Interleukin-1 alpha, IL-1 alpha, Hematopoietin-1, IL1A, IL1F1

**Target/Specificity**
This IL1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 65-94 amino acids from human IL1A.

**Dilution**
WB~~1:1000
E~~Use at an assay dependent concentration.

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
IL1A-S87 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### IL1A-S87 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).

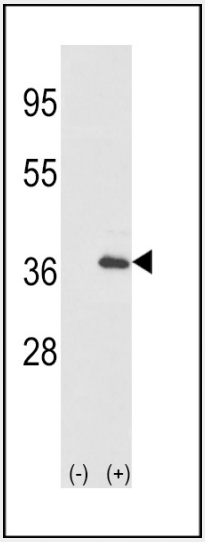
**Cellular Location**
Nucleus. Cytoplasm. Secreted Note=The lack of a specific hydrophobic segment in the precursor sequence suggests that IL-1 is released by damaged cells or is secreted by a mechanism differing from that used for other secretory proteins The secretion is dependent on protein unfolding 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

## IL1A-S87 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

## IL1A-S87 Antibody - Images



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Western blot analysis of IL1A (arrow) using rabbit polyclonal IL1A-pS87 (Cat. #AP6860a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the IL1A gene (Lane 2) (Origene Technologies).

## IL1A-S87 Antibody - Background

IL1A is a member of the interleukin 1 cytokine family. This cytokine is a pleiotropic cytokine involved in various immune responses, inflammatory processes, and hematopoiesis. This cytokine is produced by monocytes and macrophages as a proprotein, which is proteolytically processed and released in response to cell injury, and thus induces apoptosis.

## IL1A-S87 Antibody - References

Cousin,E.,et.al., Neurobiol. Aging (2009)