

**IL-1B Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP51281****Specification**

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**IL-1B Antibody - Product Information**

Application	<b>WB, IHC-P, E</b>
Primary Accession	<a href="#">P01584</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>31 KDa</b>

**IL-1B Antibody - Additional Information****Gene ID** 3553**Other Names**

Interleukin-1 beta, IL-1 beta, Catabolin, IL1B, IL1F2

**Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**IL-1B Antibody - Protein Information****Name** IL1B ([HGNC:5992](#))**Synonyms** IL1F2**Function**

Potent pro-inflammatory cytokine (PubMed: [10653850](http://www.uniprot.org/citations/10653850), PubMed: [12794819](http://www.uniprot.org/citations/12794819), PubMed: [28331908](http://www.uniprot.org/citations/28331908), PubMed: [3920526](http://www.uniprot.org/citations/3920526)). Initially discovered as the major endogenous pyrogen, induces prostaglandin synthesis, neutrophil influx and activation, T-cell activation and cytokine production, B-cell activation and antibody production, and fibroblast proliferation and collagen production (PubMed: [3920526](http://www.uniprot.org/citations/3920526)). Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells (PubMed: [10653850](http://www.uniprot.org/citations/10653850)). Plays a role in angiogenesis by inducing VEGF production synergistically with TNF and IL6 (PubMed: [12794819](http://www.uniprot.org/citations/12794819)). Involved in transduction of inflammation downstream of pyroptosis: its mature form is specifically released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore (PubMed:

href="http://www.uniprot.org/citations/33377178" target="\_blank">33377178</a>, PubMed:<a href="http://www.uniprot.org/citations/33883744" target="\_blank">33883744</a>). Acts as a sensor of *S.pyogenes* infection in skin: cleaved and activated by pyogenes SpeB protease, leading to an inflammatory response that prevents bacterial growth during invasive skin infection (PubMed:<a href="http://www.uniprot.org/citations/28331908" target="\_blank">28331908</a>).

#### **Cellular Location**

Cytoplasm, cytosol. Secreted. Lysosome Secreted, extracellular exosome {ECO:0000250|UniProtKB:P10749} Note=The precursor is cytosolic (PubMed:15192144). In response to inflammasome-activating signals, such as ATP for NLRP3 inflammasome or bacterial flagellin for NLRC4 inflammasome, cleaved and secreted (PubMed:24201029, PubMed:33377178, PubMed:33883744). Mature form is secreted and released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore (PubMed:33883744). In contrast, the precursor form is not released, due to the presence of an acidic region that is proteolytically removed by CASP1 during maturation (PubMed:33883744). The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10 (PubMed:32272059)

#### **Tissue Location**

Expressed in activated monocytes/macrophages (at protein level).

### **IL-1B 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 Cytometry](#)
- [Cell Culture](#)

### **IL-1B Antibody - Images**

#### **IL-1B Antibody - Background**

Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells.

#### **IL-1B Antibody - References**

Auron P.E., et al. Proc. Natl. Acad. Sci. U.S.A. 81:7907-7911(1984).  
March C.J., et al. Nature 315:641-647(1985).  
Clark B.D., et al. Nucleic Acids Res. 14:7897-7914(1986).  
Clark B.D., et al. Nucleic Acids Res. 15:868-868(1987).  
Nishida T., et al. Biochem. Biophys. Res. Commun. 143:345-352(1987).