

**IL-1 beta Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10845****Specification**

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**IL-1 beta Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P01584</a>
Other Accession	<a href="#">EAW73607</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	30748

**IL-1 beta Antibody - Additional Information****Gene ID** 3553

Application & Usage	<b>Western blot analysis (0.5-4 µg/ml).</b> <b>However, the optimal conditions should be determined individually. Recombinant human IL-1β can be used as a positive control.</b>
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**Other Names**

IL-1 beta, IL1 beta, IL 1 beta, Interluekin-1 beta, Interluekin 1 beta, interluekin

**Target/Specificity**

IL-1b

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (0.5 mg/ml) affinity purified rabbit anti-human IL-1β 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 beta Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## IL-1 beta Antibody - Protein Information

**Name** IL1B ([HGNC:5992](#))

**Synonyms** IL1F2

### Function

Potent pro-inflammatory cytokine (PubMed:<a href="http://www.uniprot.org/citations/3920526" target="\_blank">3920526</a>, PubMed:<a href="http://www.uniprot.org/citations/10653850" target="\_blank">10653850</a>, PubMed:<a href="http://www.uniprot.org/citations/12794819" target="\_blank">12794819</a>, PubMed:<a href="http://www.uniprot.org/citations/28331908" target="\_blank">28331908</a>). 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:<a href="http://www.uniprot.org/citations/3920526" target="\_blank">3920526</a>). Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells (PubMed:<a href="http://www.uniprot.org/citations/10653850" target="\_blank">10653850</a>). Plays a role in angiogenesis by inducing VEGF production synergistically with TNF and IL6 (PubMed:<a href="http://www.uniprot.org/citations/12794819" target="\_blank">12794819</a>). 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:<a 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).

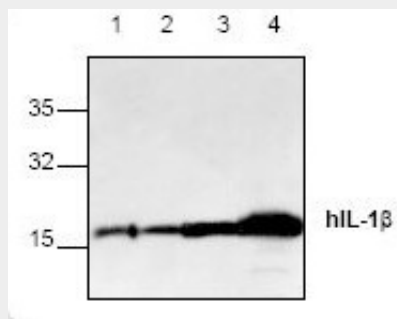
## IL-1 beta Antibody - Protocols

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-1 beta Antibody - Images



Western blot analysis with recombinant human IL-1. Lane 1: 10 ng; Lane 2: 50 ng; Lane 3: 250 ng; Lane 4: 1μg.

### IL-1 beta Antibody - Background

IL-1 $\beta$  is a potent immuno-modulator that mediates a wide range of immune and inflammatory responses including the activation of B and T cells. Human IL-1 $\beta$  is a 17.0 kDa protein containing 153 amino acid residues.