

**Anti-IL-1 beta Antibody**  
**Catalog # ABO10675****Specification**

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

Application	WB
Primary Accession	<a href="#">P10749</a>
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Interleukin-1 beta(IL1B) detection. Tested with WB in Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-IL-1 beta Antibody - Additional Information**

**Gene ID** 16176

**Other Names**

Interleukin-1 beta, IL-1 beta, IL1b

**Calculated MW**

30931 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Mouse, Rat<br>

**Subcellular Localization**

Secreted. 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.

**Protein Name**

Interleukin-1 beta(IL-1 beta)

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of mouse IL-1 beta(250-265aa FLGNNSGQDIIDFTME), different from the related rat sequence by four amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-IL-1 beta Antibody - Protein Information****Name** Il1b**Function**

Potent pro-inflammatory cytokine. 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. Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T- helper 1 (Th1) cells. Plays a role in angiogenesis by inducing VEGF production synergistically with TNF and IL6. 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.

**Cellular Location**

Cytoplasm, cytosol. Secreted Lysosome {ECO:0000250|UniProtKB:P01584}. Secreted, extracellular exosome. Note=The precursor is cytosolic In response to inflammasome-activating signals, such as ATP for NLRP3 inflammasome or bacterial flagellin for NLRC4 inflammasome, cleaved and secreted. Mature form is secreted and released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore. In contrast, the precursor form is not released, due to the presence of an acidic region that is proteolytically removed by CASP1 during maturation. The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10. {ECO:0000250|UniProtKB:P01584}

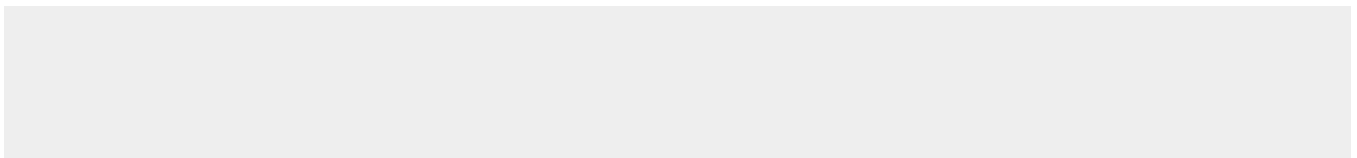
**Tissue Location**

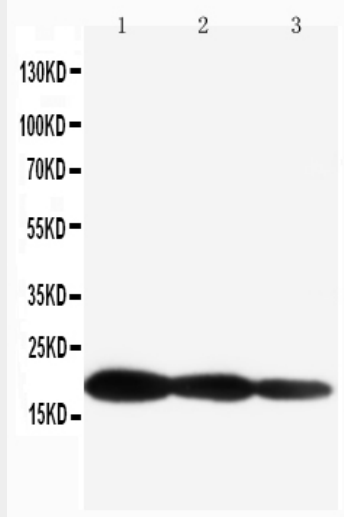
Expressed in activated macrophages (at protein level).

**Anti-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](#)

**Anti-IL-1 beta Antibody - Images**



Anti-IL-1 beta antibody, ABO10675, Western blotting  
Lane 1: Recombinant Mouse IL-1 beta Protein 10ng  
Lane 2: Recombinant Mouse IL-1 beta Protein 5ng  
Lane 3: Recombinant Mouse IL-1 beta Protein 2.5ng

#### **Anti-IL-1 beta Antibody - Background**

Interleukin-1 beta(IL-1beta) also know as catabolin, is a cytokine protein that in humans is encoded by the IL1B gene, which localizes to the long arm of chromosome at position 2q13-2q21 between two fragile sites. Interleukin 1(IL-1) is a protein with several biological activities regulating host defense and immune responses.<sup>2</sup> The human IL-1 family plays an important role in the pathogenesis of many diseases and functions as a key mediator of the host response to various infectious, inflammatory, and immunologic challenges.