

Anti-IL-1 beta Antibody
Catalog # ABO10850**Specification**

Anti-IL-1 beta Antibody - Product Information

Application	WB
Primary Accession	Q63264
Host	Rabbit
Reactivity	Rat
Clonality	Polyclonal
Format	Lyophilized

Description

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

Reconstitution

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

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

Interleukin-1 beta, IL-1 beta, Il1b

Calculated MW

30644 MW KDa

Application Details

ELISA , 0.5-1 µg/ml, Rat, -
Western blot, 0.1-0.5 µg/ml, Rat

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of rat IL-1 beta(249-263aa FLGNSNGRDIVDFTM).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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 {ECO:0000312|RGD:2891}

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

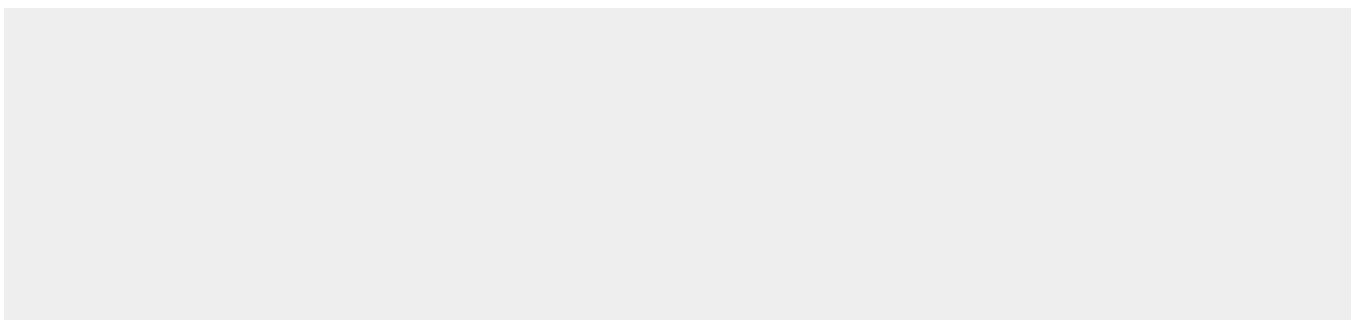
Cytoplasm, cytosol {ECO:0000250|UniProtKB:P01584}. Secreted {ECO:0000250|UniProtKB:P01584}. Lysosome {ECO:0000250|UniProtKB:P01584}. Secreted, extracellular exosome {ECO:0000250|UniProtKB:P10749}. Note=The precursor is cytosolic. In response to inflammasome-activating signals, such as ATP for NLRP3 inflammasome 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}

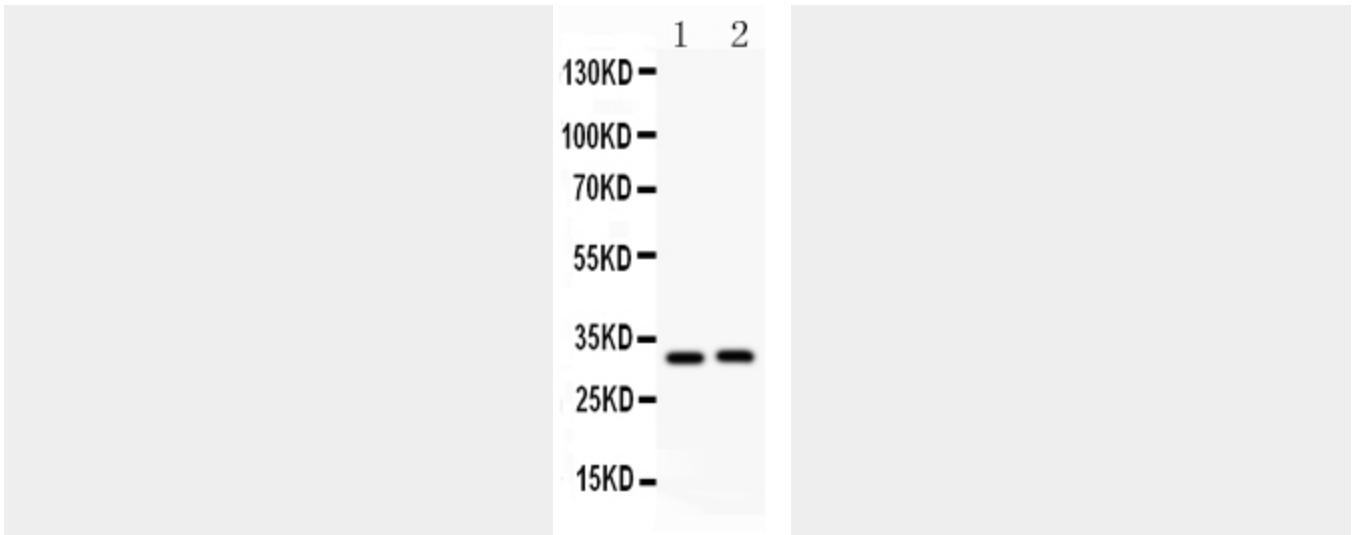
Anti-IL-1 beta Antibody - Protocols

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, ABO10850, Western blotting All lanes: Anti IL-1 beta (ABO10850) at 0.5ug/ml Lane 1: Rat Spleen Tissue Lysate at 50ug Lane 2: Rat Thymus Tissue Lysate at 50ug Predicted bind size: 31KD Observed bind size: 31KD

Anti-IL-1 beta Antibody - Background

Interleukin-1 beta (IL-1beta) also known as catabolin, is a cytokine protein that in humans is encoded by the IL1B gene, which localizes to the long arm of chromosome 2 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. 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.