

Anti-IL-1 beta Antibody

Catalog # ABO10675

Product Information

Application	WB
Primary Accession	P10749
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.

Additional Information

Gene ID	16176
Other Names	Interleukin-1 beta, IL-1 beta, IL1b
Calculated MW	30931
Application Details	Western blot, 0.1-0.5 µg/ml, Mouse, 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.
Source	Eukaryota
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 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 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.

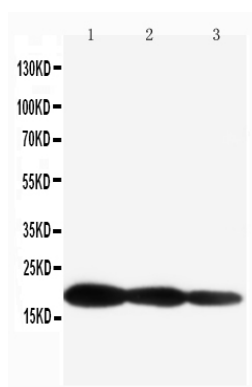
Protein Information

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).

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.² 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.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.