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Anti-IL-1 beta Antibody

Catalog # ABO10850

Product Information

Application	WB, E
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.

Additional Information

Other Names	Interleukin-1 beta, IL-1 beta, Il1b
Calculated MW	30644
Application Details	ELISA , 0.5-1 □g/ml, Rat, - Western blot, 0.1-0.5 □g/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.
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 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.

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}

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 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.

Images

Anti- IL-1 beta antibody, ABO10850, Western blottingAll lanes: Anti IL-1 beta (ABO10850) at 0.5ug/mlLane 1: Rat Spleen Tissue Lysate at 50ugLane 2: Rat Thymus Tissue Lysate at 50ugPredicted bind size: 31KDObserved bind size: 31KD