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IL1B Antibody (Center) (Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2121a

Specification

IL1B Antibody (Center) (Ascites) - Product Information

Application	**WB,E**
Primary Accession	P01584
Other Accession	P14628, P79182, NP_000567.1
Reactivity	**Human**
Predicted	**Monkey, Rabbit**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**30748**
Antigen Region	**148-174**

IL1B Antibody (Center) (Ascites) - Additional Information

Gene ID 3553

Other Names
Interleukin-1 beta, IL-1 beta, Catabolin, IL1B, IL1F2

Target/Specificity
This IL1B antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 148-174 amino acids from the Central region of human IL1B.

Dilution
WB~~1:2000~4000

Format
Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
IL1B Antibody (Center) (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

IL1B Antibody (Center) (Ascites) - Protein Information

Name IL1B (HGNC:5992)

Synonyms IL1F2

Function Potent pro-inflammatory cytokine (PubMed:3920526, PubMed:10653850, PubMed:12794819, PubMed:28331908). 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:3920526). Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells (PubMed:10653850). Plays a role in angiogenesis by inducing VEGF production synergistically with TNF and IL6 (PubMed:12794819). 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:33377178, PubMed:33883744). 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:28331908).

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).

IL1B Antibody (Center) (Ascites) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL1B Antibody (Center) (Ascites) - Images

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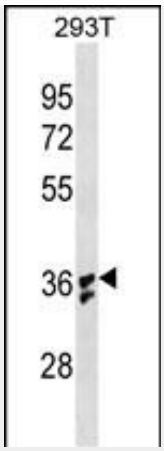

IL1B Antibody (Center)(Ascites)(Cat. #AM2121a). 293 cell lysates transiently transfected with the IL1B gene.

IL1B Antibody (Center) (Ascites) - Background

The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. The induction of cyclooxygenase-2 (PTGS2/COX2) by this cytokine in the central nervous system (CNS) is found to contribute to inflammatory pain hypersensitivity. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. [provided by RefSeq].

IL1B Antibody (Center) (Ascites) - References

Lee, B., et al. J. Immunol. 185(10):5926-5934(2010)
Arana-Argaez, V.E., et al. J. Biol. Chem. 285(43):32824-32833(2010)
Zhang, Z., et al. J. Biol. Chem. 285(43):33092-33103(2010)
Wang, D., et al. Nat. Immunol. 11(10):905-911(2010)
Gein, O.N., et al. Patol Fiziol Eksp Ter 1, 10-13 (2010) :

IL1B Antibody (Center) (Ascites) - Citations

- Monocyte chemoattractant protein 1 released from macrophages induced by hepatitis C virus promotes monocytes migration.