

Mouse IL1B Monoclonal Antibody | anti-IL1B antibody

IL1B Antibody (Center) (Ascites)

CATALOG # AAA283465	HOST Mouse	REACTIVITY Human (Predicted Reactivity: Monkey, Rabbit)	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

IL1B; Monoclonal Antibody; IL1B Antibody (Center) (Ascites); Interleukin-1 beta; IL-1 beta; Catabolin; IL1F2; anti-IL1B antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human (Predicted Reactivity: Monkey, Rabbit)
Clonality	Monoclonal
Isotype	IgG1
Clone Number	614CT4.3.1
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.
Form/Format	Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.
Sequence Positions	148-174
Sequence Length	269
Applicable Applications for anti-IL1B antibody	ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Cellular location	Cytoplasm, cytosol. Lysosome. Secreted, exosome {ECO:0000250 UniProtKB:P10749}. Cytoplasmic vesicle, autophagosome. Secreted 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 IL1B lacks any known signal sequence and the pathway(s) of its secretion is(are) not yet fully understood (PubMed:24201029). On the basis of experimental results, several unconventional secretion mechanisms have been proposed. 1. Secretion via secretory lysosomes: a fraction of CASP1 and IL1B precursor may be incorporated, by a yet undefined mechanism, into secretory lysosomes that undergo Ca(2+)-dependent exocytosis with release of mature IL1B (PubMed:15192144). 2. Secretory autophagy: IL1B- containing autophagosomes may fuse with endosomes or multivesicular bodies (MVBs) and then merge with the plasma membrane releasing soluble IL1B or IL1B-containing exosomes (PubMed:24201029). However, autophagy impacts IL1B production at several levels and its role in secretion is still controversial 3. Secretion via exosomes: ATP-activation of P2RX7 leads to the formation of MVBs containing exosomes with entrapped IL1B, CASP1 and other inflammasome components. These MVBs undergo exocytosis with the release of exosomes. The release of soluble IL1B occurs after the lysis of exosome membranes (By similarity). 4. Secretion by microvesicle shedding: activation of the ATP receptor P2RX7 may induce an immediate shedding of membrane-derived microvesicles containing IL1B and possibly inflammasome components. The cytokine is then released in the extracellular compartment after microvesicle lysis (PubMed:11728343). 5. Release by translocation through permeabilized plasma membrane. This may occur in cells undergoing pyroptosis due to sustained activation of the inflammasome (By similarity). These mechanisms may not be mutually exclusive. {ECO:0000250 UniProtKB:P10749, ECO:0000269 PubMed:11728343, ECO:0000269 PubMed:15192144, ECO:0000305 PubMed:24201029}
Preparation and 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.

IMAGES



WB (Western Blot)
IL1B Antibody (Center)(Ascites). 293 cell lysates transiently transfected with the IL1B gene.

ADDITIONAL INFORMATION

Related Product Information for anti-IL1B antibody	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].
Product Categories/Family for anti-IL1B antibody	Cancer; Cardiovascular; Immunology; Metabolism; Signal Transduction
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) :

NCBI AND UNIPROT INFORMATION

NCBI GI #	10835145
NCBI GeneID	3553
NCBI Accession #	NP_000567.1
NCBI GenBank Nucleotide #	NM_000576.2
UniProt Accession #	P01584; Q53X59; Q53XX2; Q7M4S7; Q7RU01; Q96HE5; Q9UCT6
NCBI Official Full Name	interleukin-1 beta proprotein
NCBI Official Synonym Full Names	interleukin 1, beta
NCBI Official Symbol	IL1B
NCBI Official Synonym Symbols	IL-1; IL1F2; IL1-BETA
NCBI Protein Information	interleukin-1 beta
UniProt Protein Name	Interleukin-1 beta
UniProt Gene Name	IL1B
UniProt Synonym Gene Names	IL1F2; IL-1 beta
UniProt Entry Name	IL1B_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/il1b-antibody-clone-614ct4-3-1-western-blot-elisa/283465>