PRODUCT DATA SHEET IL-1 β Monoclonal Antibody

Catalog No.	IMB0001
Reactivity	Human
Applications	WB; ELISA
Gene Name	IL1B
Protein Name	Interleukin- 1 beta
Human Gene Id	3553
Swiss-Prot	P01584
Formulation	Ascitic fluid containing 0.03% sodium azide, 0.5% BSA, 50% glycerol.
Source	Monoclonal, Mouse
Dilution	WB: 1:500- 1:2000 ELISA: 1:1000-5000
PurIF:ication	Affinity purification
Concentration	
Storage&Stability	-20°C/1 year
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 prolIF:eration, dIF:ferentiation, 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, Jul 2008],
Subcellular Location.	Cytoplasm, cytosol. Secreted. Lysosome. Secreted, extracellular exosome. 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).

MW

31kD,18kD

Products Images:



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Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-IL-1 β (PTR2541) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: Untreated THP-1 Lane 2: THP-1 treated with LPS(100ng/ml) for 3h