

IL-1 β (PTR2541) Mouse mAb

Catalog No :	YM4682
Reactivity :	Human (predicted: Mouse; Rat)
Applications :	WB;ELISA
Target :	IL-1 β
Fields :	>>Antifolate resistance;>>MAPK signaling pathway;>>Cytokine-cytokine receptor interaction;>>NF-kappa B signaling pathway;>>Necroptosis;>>Osteoclast differentiation;>>Toll-like receptor signaling pathway;>>NOD-like receptor signaling pathway;>>Cytosolic DNA-sensing pathway;>>C-type lectin receptor signaling pathway;>>Hematopoietic cell lineage;>>IL-17 signaling pathway;>>Th17 cell differentiation;>>TNF signaling pathway;>>Inflammatory mediator regulation of TRP channels;>>Non-alcoholic fatty liver disease;>>AGE-RAGE signaling pathway in diabetic complications;>>Alcoholic liver disease;>>Type I diabetes mellitus;>>Alzheimer disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Pathogenic Escherichia coli infection;>>Shigellosis;>>Salmonella infection;>>Pertussis;>>Legionellosis;>>Yersinia infection;>>Leishmaniasis;>>Chagas disease;>>African trypanosomiasis;>>Malaria;>>Amoebiasis;>>Tuberculosis;>>Measles;>>Human cytomegalovirus infection;>>Influenza A;>>Herpes simp
Gene Name :	IL1B IL1F2
Protein Name :	Interleukin-1 beta (IL-1 beta) (Catabolin)
Human Gene Id :	3553
Human Swiss Prot No :	P01584
Mouse Gene Id :	16176
Mouse Swiss Prot No :	P10749
Rat Swiss Prot No :	Q63264
Immunogen :	Synthesized peptide derived from human IL-1 β AA range: 150-250

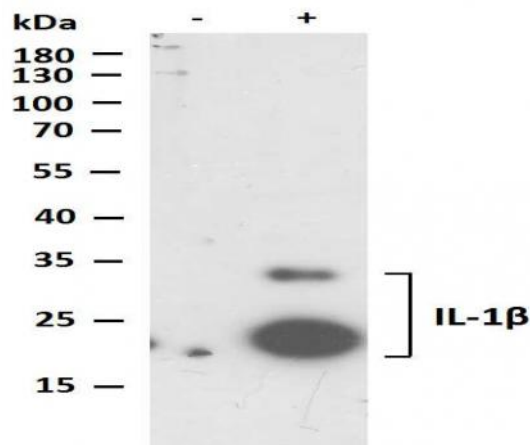
Specificity :	This antibody detects endogenous levels of IL-1 β at Human, Mouse,Rat
Formulation :	PBS, pH7.4, 50% glycerol, 0.03%Proclin 300
Source :	Mouse,monoclonal:IgG1,Kappa
Dilution :	WB 1:500-2000 ELISA 1:5000-20000
Purification :	Protein G
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	17,28,31kDa
Background :	<p>interleukin 1 beta(IL1B) Homo sapiens 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, Jul 2008],</p>
Function :	<p>domain:The similarity among the IL-1 precursors suggests that the amino ends of these proteins serve some as yet undefined function.,function:Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells.,online information:Interleukin-1 entry,online information:The Singapore human mutation and polymorphism database,similarity:Belongs to the IL-1 family.,subcellular location: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.,subunit:Mono</p>
Subcellular Location :	<p>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</p>

and facilitated by the cargo receptor TMED10 (PubMed:32272059). .

Expression :

Expressed in activated monocytes/macrophages (at protein level).

Products Images



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
Predicted band size: 31,18kDa Observed band size: 31,18kDa