Best Tools for immunology Research

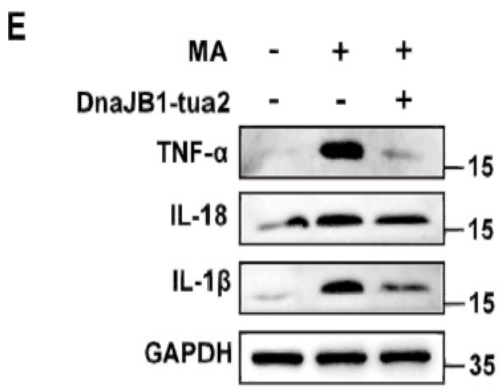
IL-1β Polyclonal Antibody

Catalog No :	YT5201
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	IL-1β
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
Protein Name :	Interleukin-1 beta
Human Gene Id :	3553
Human Swiss Prot No :	P01584
Mouse Gene Id :	16176
Mouse Swiss Prot No :	P10749
Rat Swiss Prot No :	Q63264
Immunogen :	The antiserum was produced against synthesized peptide derived from the Internal region of human IL1B. AA range:181-230

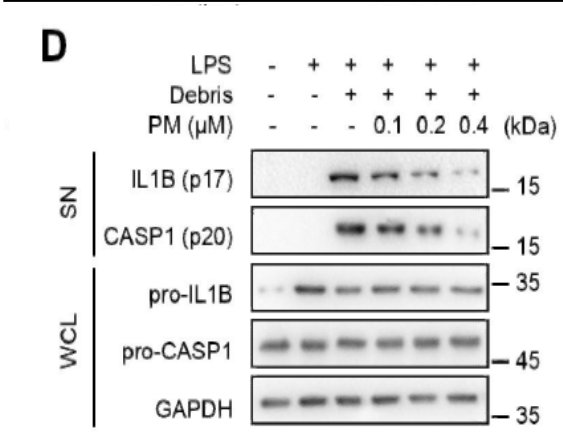
Specificity :	IL-1β Polyclonal Antibody detects endogenous levels of IL-1β protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	17kD
Cell Pathway :	MAPK_ERK_Growth;MAPK_G_Protein;Cytokine-cytokine receptor interaction;Apoptosis_Inhibition;Apoptosis_Mitochondrial;Apoptosis_Overview;Toll_Like;NOD-like receptor;Cytosolic DNA-sensing pathway;Hematopo
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, Jul 2008],
Function :	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

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). .
Expression :	Expressed in activated monocytes/macrophages (at protein level).
Tag :	orthogonal
Sort :	1
No1 :	Sc-7884
No2 :	Sc-7884
No4 :	1
Host :	Rabbit
Modifications :	Unmodified

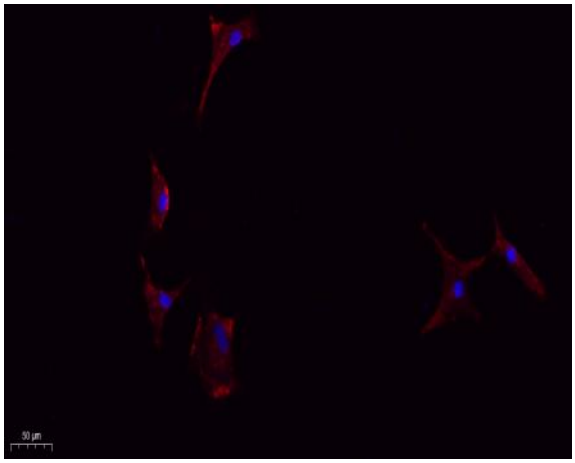
Products Images



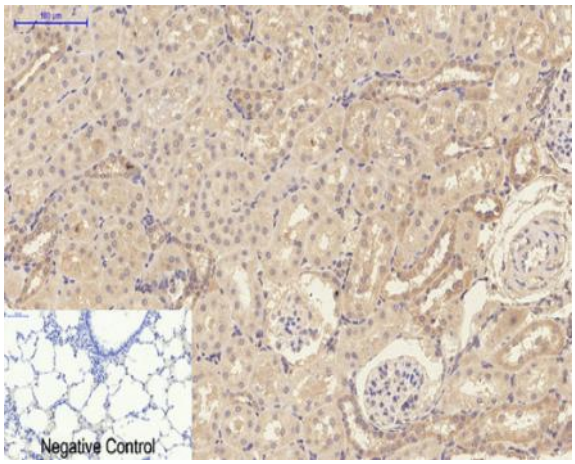
A novel gene therapy for methamphetamine- induced cognitive disorder with a hyper-acidified fusion variant of DnaJB1 Molecular Therapy-Nucleic Acids Zhurong Zou WB Mouse hippocampus BV2 cell



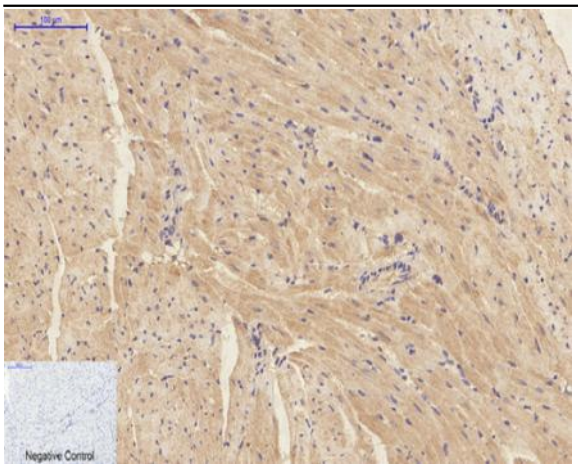
Pristimerin suppresses AIM2 inflammasome by modulating AIM2-PYCARD/ASC stability via selective autophagy to alleviate tendinopathy. Autophagy Xiao Yu WB Mouse Achilles tendon Peritoneal macrophages



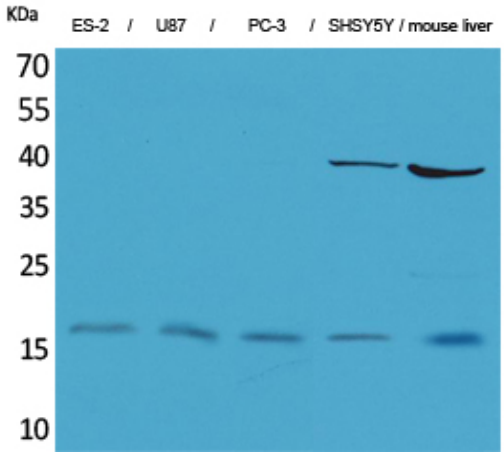
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



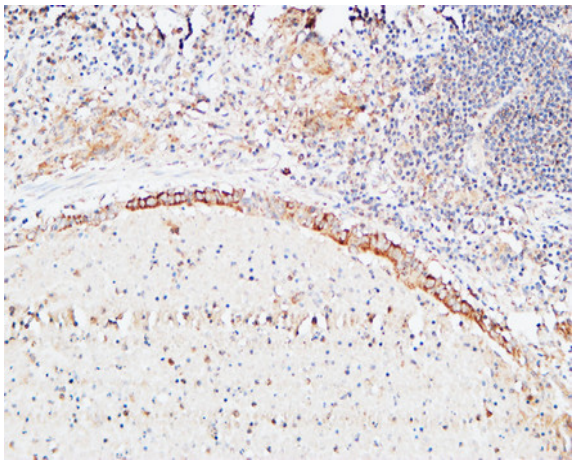
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,IL-1β Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



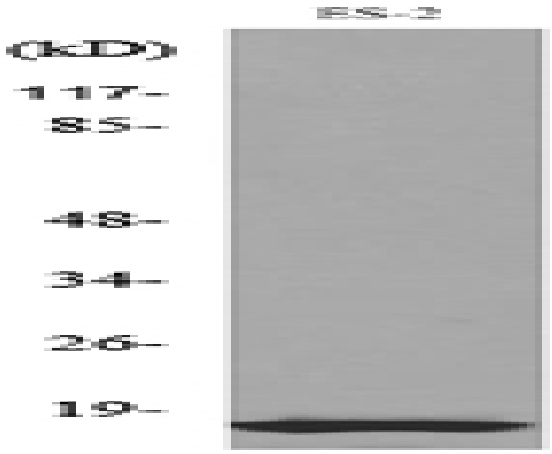
Immunohistochemical analysis of paraffin-embedded Mouse-heart tissue. 1,IL-1β Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



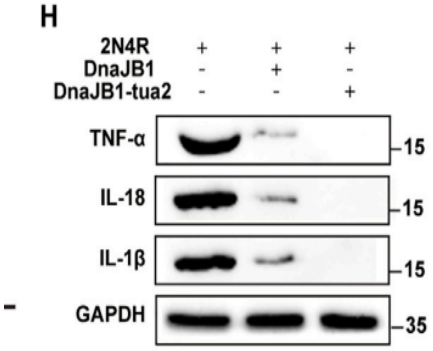
Western Blot analysis of ES-2, U87, PC-3, SHSY5Y, mouse liver cells using IL-1β Polyclonal Antibody. Antibody was diluted at 1:2000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded Human lung. 1, Antibody was diluted at 1:200(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Western blot analysis of lysate from ES-2 cells, using IL1B Antibody.



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