

## IL-1 $\beta$ Rabbit pAb

CatalogNo: YT5201 **Orthogonal Validated** 

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IHC, IF, ELISA

#### MW

- 17kD (Observed)

#### Isotype

- IgG

### Recommended Dilution Ratios

**WB 1:500-1:2000****IHC: 1:100-300****ELISA 1:20000****IF 1:100-300****Not yet tested in other applications.**

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from the Internal region of human IL1 $\beta$ . AA range:181-230**Specificity** IL-1 $\beta$  Polyclonal Antibody detects endogenous levels of IL-1 $\beta$  protein.

## Target Information

**Gene name** IL1B

**Protein Name** Interleukin-1 beta

Organism	Gene ID	UniProt ID
Human	<a href="#">3553</a> ;	<a href="#">P01584</a> ;
Mouse	<a href="#">16176</a> ;	<a href="#">P10749</a> ;
Rat		<a href="#">Q63264</a> ;

### Cellular Localization

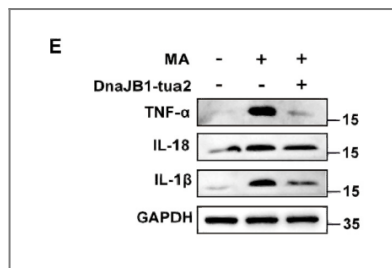
Cytoplasm, cytosol . Secreted . Lysosome . Secreted, extracellular exosome . The precursor is cytosolic (PubMed:15192144). In response to inflammasome-activating signals, such as ATP for NLRP3 inflammasome or bacterial flagellin for NLRC4 inflammasome, cleaved and secreted (PubMed:24201029, PubMed:33377178, 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). .

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

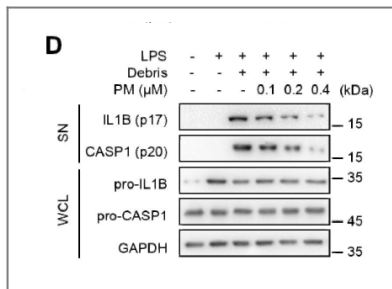
### Function

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:Monomer.,

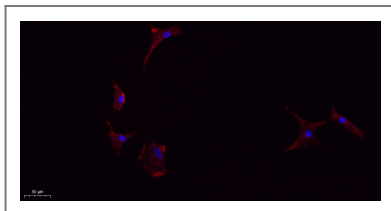
## Validation Data



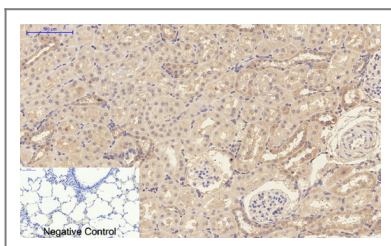
A novel gene therapy for methamphetamine- induced cognitive disorder with a hyper-acidified fusion variant of DnajB1 Molecular Therapy-Nucleic Acids Zhurong Zou WB Mouse hippocampus BV2 cell



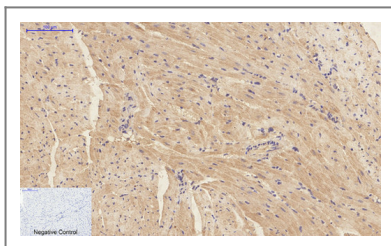
Pristimerin suppresses AIM2 inflammasome by modulating AIM2-PYCARD/ASC stability via selective autophagy to alleviate tendinopathy. Autophagy Xiao Yu WB Mouse Achilles tendon Peritoneal macrophages



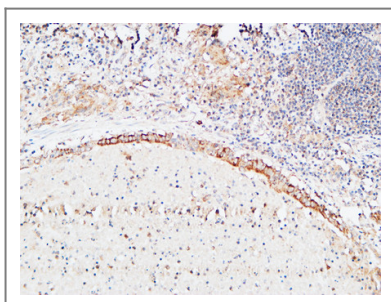
Immunofluorescence analysis of A549. 1, primary Antibody (red) was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min.



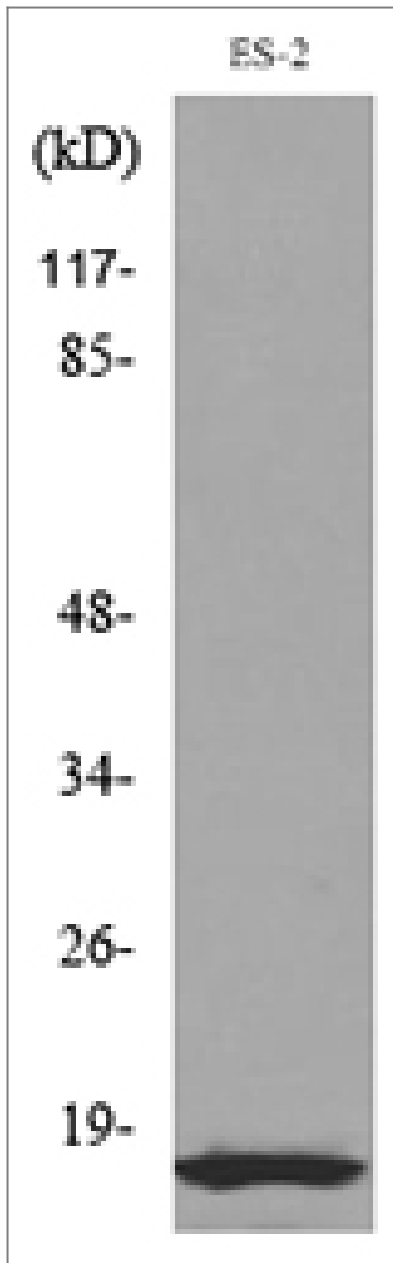
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1, IL-1 $\beta$  Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control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



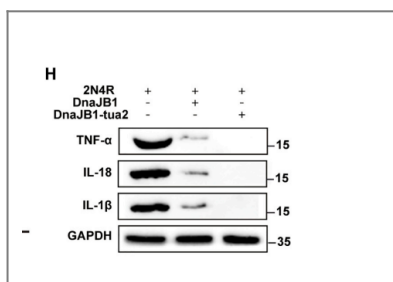
Immunohistochemical analysis of paraffin-embedded Mouse-heart tissue. 1, IL-1 $\beta$  Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control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



Immunohistochemical analysis of paraffin-embedded Human lung. 1, Antibody was diluted at 1:200 (4°C overnight). 2, High-pressure and temperature EDTA, pH 8.0 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.



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

## Contact information

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Please scan the QR code to access additional product information:  
**IL-1 $\beta$  Rabbit pAb**

