

## IL-1 Beta Rabbit pAb

Catalog Number: bs-6319R

Target Protein: IL-1 Beta

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (2ug/Test)

Reactivity: Human, Mouse, Rat (predicted:Rabbit, Dog, Horse)

Predicted MW: 17/32 kDa

Entrez Gene: 3553

Swiss Prot: P01584

Source: KLH conjugated synthetic peptide derived from human IL-1 Beta: 161-269/269.

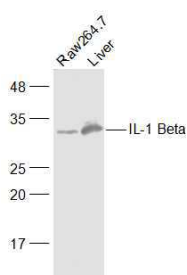
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

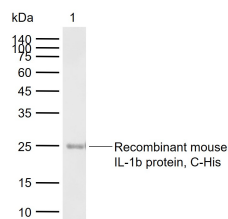
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**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].

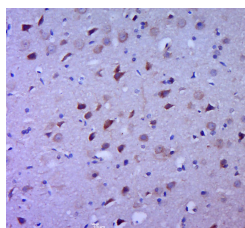
### VALIDATION IMAGES



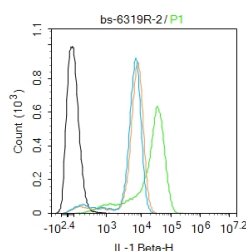
Sample: Raw264.7(Mouse) Cell Lysate at 30 ug Liver (Mouse) Lysate at 40 ug Primary: Anti-IL-1 Beta (bs-6319R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 17/30 kD Observed band size: 30 kD



Sample: Lane 1: Recombinant mouse IL-1 $\beta$  protein, C-His Primary: Anti-IL-1 Beta (bs-6319R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 17/32 kDa Observed band size: 25 kDa



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IL-1 Beta) Polyclonal Antibody, Unconjugated (bs-6319R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Blank control: THP-1. Primary Antibody (green line): Rabbit Anti-IL-1 Beta antibody (bs-6319R) Dilution: 2 $\mu$ g /10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-FITC Dilution: 0.5 $\mu$ g /test. Protocol The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=13.8] Zhou Xinghong. et al. Gut microbiota dysbiosis in hyperuricaemia promotes renal injury through the activation of NLRP3 inflammasome. MICROBIOME. 2024 Dec;12(1):1-20 WB ; Rat . 38907332

[IF=13.116] Zhang X et al. Oligodendroglial glycolytic stress triggers inflammasome activation and neuropathology in Alzheimer' s diseaseSci Adv.2020 Dec 4;6(49):eabb8680. IF ; Mouse . 33277246

[IF=12.8] Linhong Liu. et al. Transformable peptide blocks NF- $\kappa$ B/I $\kappa$ B $\alpha$  pathway through targeted coating I $\kappa$ B $\alpha$  against rheumatoid arthritis. BIOMATERIALS. 2025 Mar;314:122839 IHC ; Rat . 39288618

[IF=11.799] Chenyu Zhang. et al. The Nrf2-NLRP3-caspase-1 axis mediates the neuroprotective effects of Celastrol in Parkinson's disease. Redox Biol. 2021 Nov;47:102134 WB ; mouse . 34600334

[IF=9.5] Xianmou Fan. et al. A Multifunctional, Tough, Stretchable, and Transparent Curcumin Hydrogel with Potent Antimicrobial, Antioxidative, Anti-inflammatory, and Angiogenesis Capabilities for Diabetic Wound Healing. ACS APPL MATER INTER. 2024;16(8):9749–9767 IHC ; Rat . 38359334