

# IL1 $\beta$ Rabbit mAb

**Catalog No.: A25874** Recombinant

## Basic Information

**Observed MW**

17kDa,30-35kDa

**Calculated MW**

31kDa

**Category**

Primary antibody

**Applications**

WB,IF/ICC,ELISA

**Cross-Reactivity**

Human

**CloneNo number**

ARC67219

## 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. Similarly, IL-1B has been implicated in human osteoarthritis pathogenesis. Patients with severe Coronavirus Disease 2019 (COVID-19) present elevated levels of pro-inflammatory cytokines such as IL-1B in bronchial alveolar lavage fluid samples. The lung damage induced by the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL-1B. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2.

## Recommended Dilutions

**WB** 1:1000 - 1:2000

**IF/ICC** 1:50 - 1:200

**ELISA** Recommended starting concentration is 1  $\mu$ g/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

**Gene ID**

3553

**Swiss Prot**

P01584

**Immunogen**

Recombinant fusion protein containing a sequence corresponding to amino acids 117-269 of human IL1 $\beta$  (NP\_000567.1).

**Synonyms**

IL-1; IL1F2; IL1beta; IL1-BETA

## Contact

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## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

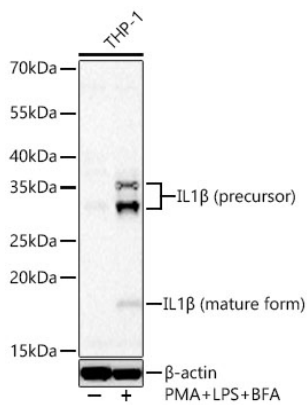
Affinity purification

**Storage**

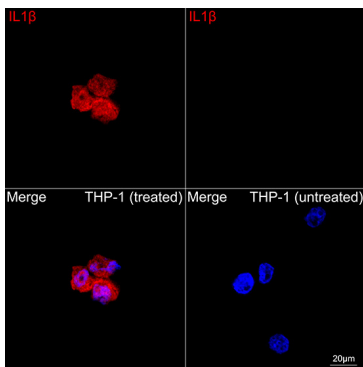
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide,0.05% BSA,50% glycerol,pH7.3.

## Validation Data



Western blot analysis of lysates from THP-1 cells using IL1 $\beta$  Rabbit mAb (A25874) at 1:1000 dilution incubated overnight at 4°C. THP-1 cells were treated by PMA (80 nM) at 37°C for overnight and LPS (1  $\mu$ g/ml) at 37°C for 6 hours and Brefeldin A for 3 hours of stimulation. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 30  $\mu$ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 90s.



Confocal imaging of THP-1 cells (treated with TPA and LPS) and THP-1 cells (untreated) using IL1 $\beta$  Rabbit mAb (A25874, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.