



## Mouse Anti-Human IL-1 $\beta$ Monoclonal Antibody Datasheet

**Product Name:** mAb anti-Human IL-1 $\beta$

**Clone No.:** S1H12

**Catalogue No.:** MO-C40029A

**Quantity:** 0.5 mg/vial

**Description:** Mouse monoclonal antibody to human Interleukin-1 beta (IL-1 $\beta$ )

**Purification:** Protein G affinity purified

**Product Type:** Primary antibody

**Target Protein:** Human IL-1 $\beta$

**Immunogen:** Purified recombinant human IL-1 $\beta$

**Fusion Myeloma:** Sp2/0-Ag14

**Specificity:** The antibody is reactive with natural and recombinant human IL-1 $\beta$

**Species Reactivity:** Human, others not tested

**Cross-Reactivity:** Does not show any cross reaction with recombinant human IL-1 $\alpha$ , recombinant murine IL-1 $\alpha$  or IL-1 $\beta$ .

**Host / Isotype:** Mouse, IgG1 Kappa

**Formulation:** Lyophilized from a solution in 0.01M PBS, pH 7.2.

**Reconstitution:** Double distilled water is recommended to adjust the final concentration to 1.00mg/mL.

**Storage:** Store at -20 $^{\circ}$ C

**Research Area:** Cytokine, Inflammation

**Background:** Interleukin 1 $\beta$  (IL-1 $\beta$ ) shares the IL-1 receptor with other cytokines in IL-1 family. IL-1 $\beta$  is primarily produced by activated macrophage as a proprotein, which is cleaved by caspase 1 to become active. Like IL-1 $\alpha$ , IL-1 $\beta$  is an important mediator of innate immunity. IL-1 $\beta$  stimulates lymphocyte proliferation and the production of TNF- $\alpha$ , IL-6 and IL-8. IL-1 $\beta$  and TNF- $\alpha$  can synergically act at NF $\kappa$ B and mitogen kinases including JNKs and p38 MARKs, thus leading to the selective expression of genes for immunity and inflammation.

**Applications:** **ELISA:** React with human IL-1 $\beta$

**Western Blot:** The antibody reacts with IL-1 $\beta$  expressed by human monocyte/macrophage and reacts with recombinant human IL-1 $\beta$ . The antibody, when used at concentration of 20-100ng/mL will allow visualization of 100ng/lane of recombinant human IL-1 $\beta$  on Western blot using 4-Chlorol 1-Naphthol substrate.

**References:** If research is published using this product, please inform Anogen in order to cite the reference on this datasheet. Anogen will provide one unit of product in the same category as gratitude.

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