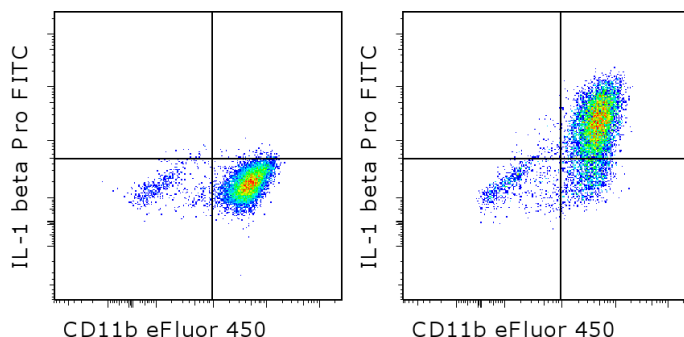


Anti-Mouse IL-1 beta Pro-form FITC

Catalog Number: 11-7114

Also known as: Interleukin-1 beta, IL-1F2

RUO: For Research Use Only. Not for use in diagnostic procedures.



Intracellular staining of BALB/c thioglycolate-elicited peritoneal macrophages unstimulated (left) or stimulated 6 hours with LPS (right) in the presence of Protein Transport Inhibitor Cocktail (cat. 00-4980) with Anti-Mouse CD11b eFluor® 450 (cat. 48-0112) and 0.125 ug of Anti-Mouse IL-1 beta Pro-form FITC. Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse IL-1 beta Pro-form FITC



Catalog Number: 11-7114

Clone: NJTEN3

Concentration: 0.5 mg/mL

Host/Isotype: Rat IgG1, kappa



Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.



Batch Code: Refer to vial



Use By: Refer to vial

Contains sodium azide

Description

This NJTEN3 monoclonal antibody reacts with the pro-form of mouse IL-1 beta, which is a proinflammatory cytokine expressed by monocytes, macrophages, and dendritic cells. It is synthesized in response to inflammatory stimuli as a 31 kDa inactive pro-form that accumulates in the cytosol. Cleavage of pro-IL-1 beta into the active 17 kDa protein requires the activation of inflammasomes, which are multi-protein complexes that respond to pathogens, stress conditions, and other danger signals. Inflammasome activation triggers the processing of the caspase-1 precursor into its active form, which in turn cleaves pro-IL-1 beta. IL-1 beta lacks a signal sequence peptide for classical ER/Golgi pathway and is instead secreted alongside caspase-1 via an alternate and incompletely understood mechanism. IL-1 beta signals through two receptors, IL-1RI and IL-1RII, both of which are shared with IL-1 alpha. These cytokines play important roles in innate host defense by triggering the production of other proinflammatory cytokines in target cells and initiating acute-phase responses. Their activity can be moderated by IL-1 Receptor Antagonist (IL-1RA), a protein produced by many cell types that blocks receptor binding through competitive inhibition. Elevated levels of IL-1 beta have been associated with many chronic inflammatory conditions, giving IL-1RA or IL-1 beta neutralizing antibodies potential therapeutical value. The NJTEN3 antibody recognizes only the pro-form of mouse IL-1 beta and does not see the active (cleaved) form.

Applications Reported

This NJTEN3 antibody has been reported for use in intracellular staining and flow cytometric analysis.

Applications Tested

This NJTEN3 antibody has been tested by intracellular staining and flow cytometric analysis of mouse thioglycolate-elicited peritoneal macrophages. This can be used at less than or equal to 0.25 ug per test. A test is defined as the amount (ug) of antibody that will stain a cell sample in a final volume of 100 uL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Mayer-Barber KD, Andrade BB, Barber DL, Hieny S, Feng CG, Caspar P, Oland S, Gordon S, Sher A. Innate and

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Related Products

00-4980 Protein Transport Inhibitor Cocktail (500X)

00-8222 IC Fixation Buffer

00-8333 Permeabilization Buffer (10X)

11-4301 Rat IgG1 K Isotype Control FITC

65-0865 Fixable Viability Dye eFluor® 780

88-8823 Intracellular Fixation & Permeabilization Buffer (plus Brefeldin A) (previously named IC Fixation & Permeabilization Buffer)