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Anti-Human IL-1 Beta Secondary Antibody

Rabbit Polyclonal, Unconjugated
Catalog # ASR3286

Product Information

Description	Anti-Human IL-1 beta (RABBIT) Antibody
Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Physical State	Liquid (sterile filtered)
Host Isotype	Antiserum
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This antibody was prepared by repeated immunizations with recombinant human IL-1ß produced in E.coli. The MW of the recombinant 153 aa IL-1ß was 17 kDa with the N-terminal amino acid at position alanine 117. This cleavage site is generated by the IL-1ß converting enzyme (ICE, capase-1).
Stabilizer	None
Preservative	None

Additional Information

Shipping Condition	Dry Ice
Application Note	Anti-Human IL-1ß has been tested for use in neutralizations, ELISA, radioimmunoassays, flow cytometry, immunohistochemistry, immunoblotting and immunoprecipitation. It recognizes the 17,000 MW mature IL-1ß. For immunoblots, typically, IL-1ß is detected from supernatants or lysates of 2 x 10E6 endotoxin-stimulated peripheral blood mononuclear cells (PBMC). PBMC are stimulated for 24 hours with 1% (v/v) serum plus 10 ng/mL E.coli LPS. For immunoprecipitation pre-clearing the preparation with a non-specific Rabbit IgG (p/n 011-001-297) to reduce background is suggested. For immunohistochemistry either paraffin fixation or cryofixation can be used for sample preparation to stain intracellular IL-1ß. For ELISA use HRP Conjugated Anti-Rabbit IgG [H&L] (Goat) (611-1302) for detection. In ELISA formats this antibody is best used as the second antibody in combination with a monoclonal antibody as a capture antibody. This antibody is also useful for neutralization of human and primate IL-1ß activity in bioassays. It does not neutralize the biological activity IL-1a. It does not neutralize the biological activity of murine, rat or rabbit IL-1ß. For neutralization, it is recommended to incubate the sample with a dilution of the antibody for at least 4 hours before being tested. A control of similarly diluted normal rabbit IgG is recommended. This antibody can be used for FACS analysis. Caution should be exhibited as the F(c) domain of the rabbit IgG molecule may interact with cells non-specifically.
Purity	This antiserum was heated to 56° C for 30 minutes. The antiserum is

	primarily directed against mature, 17,000 MW human IL-1ß and is useful in determining its presence in various assays. In general, this antibody also detects primate IL-1ß in the same formats using similar dilutions. The antiserum does not recognize human IL-1a. In ELISA formats and other immunoreactive assays, this antibody will recognize 10% of the non-denatured (native) precursor 31,000 MW IL-1ß containing samples but will primarily detect all of the 17,000 MW mature molecule. However, in immunoblot analysis of natural cell products or human body fluids, the usual procedure of hearing the sample in SDS with or without reducing agents will facilitate denaturing of the 31,000 MW IL- 1ß precursor molecule. Denatured 31,000 precursor IL-1ß will be recognized by this antibody but often migrates as a 35,000 MW band. This is due to the unfolding of the denatured precursor IL-1ß exposing epitopes not exposed in the natural state. In immunoblots, depending on the number of cells, the antibody detects the 17,000 MW band in supernatants as well as a 35,000 MW band representing the 31,000 MW IL-1ß precursor in lysates.
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Precautions Note	This product is for research use only and is not intended for therapeutic or diagnostic applications.

Background

IL-1 beta (also known as Interleukin-1 beta, IL-1ß and catabolin) is 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. IL-1ß is a monomeric secreted protein that may be released by damaged cells or is secreted by a mechanism differing from that used for other secretory proteins. IL-1 Beta Antibody is ideal for researchers in Immunology and Cardiovascular research.