

Product datasheet for R1130

IL1 beta (IL1B) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, FN, IHC, WB
Recommended Dilution:	<p>This antiserum against Human IL-1b has been tested for use in Neutralizations, ELISA, Radioimmunoassays, Immunoblotting, Immunohistochemistry and Immunoprecipitation. It recognizes the 17,000 MW mature IL-1b. Reactivity in other immunoassays is unknown.</p> <p><u>Recommended Dilutions:</u> This product has been assayed by immunoblot using HRP Goat-anti-Rabbit IgG [H&L] and TMB as a substrate. A working dilution range of 1:200 to 1:400 is suggested for this application to detect IL-1b from supernatants or lysates of 2×10^6 endotoxin-stimulated human peripheral blood mononuclear cells (PBMC). PBMC are stimulated for 24 hours with 1% (v/v) human serum plus 10 ng/mL E.coli LPS. This product has been assayed for the ability to immunoprecipitate antigen. A dilution range of 1:400 to 1:800 is suggested for this immunoassay. For immunoprecipitation, pre-clearing with a non-specific rabbit IgG is helpful to reduce background. This product has been assayed by immunohistochemistry. A dilution range of 1:200 to 1:400 is suggested for this immunoassay. Either paraffin fixation or cryofixation can be used for immunohistochemistry using a dilution of 1:200 for staining of intracellular IL-1b . This product has been assayed by ELISA against IL-1b using HRP Conjugated Anti-Rabbit IgG [H&L] (Goat) and ABTS as a substrate for 30 minutes at room temperature. A working dilution range of 1:500 to 1:5,000 is suggested for this product. For use in ELISA formats, this antibody is best used as the second antibody in combination with a monoclonal antibody as a capture antibody. This product has been assayed by Radioimmunoassay against antigen. A dilution of 1:5,000 is suggested for this immunoassay.</p>
Reactivity:	Human, Monkey
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The whole rabbit serum was prepared by repeated immunizations with recombinant human IL-1b produced in E.coli.



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Specificity:	<p>This antiserum has been heated to 56°C for 30 minutes. This antibody is primarily directed against mature, 17,000 MW human IL-1b and is useful in determining its presence in various assays.</p> <p>In general, this antibody also detects primate IL-1b 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-1b 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 heating the sample in SDS with or without reducing agents will facilitate denaturing of the 31,000 MW IL- 1b precursor molecule. Denatured 31,000 precursor IL-1b 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-1b exposing epitopes not exposed in the natural state. In immunoblots, depending on the number of cells, a 1:200 to 1:500 dilution of this antiserum detected the 17,000 MW band in supernatants as well as a 35,000 MW band representing the 31,000 MW IL-1b precursor in lysates. This antibody is also useful for neutralization of human and primate IL-1b 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-1b . It will neutralize primate IL-1b . For neutralization, it is recommended to incubate the sample with a 1:200 dilution of the antiserum for at least 4 hours before being tested. A control of similarly diluted normal rabbit IgG is recommended.</p>
Formulation:	<p>State: Serum</p> <p>State: Liquid (sterile filtered) purified Ig fraction with 0.01% sodium azide as preservative.</p>
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	<p>Store the antibody (undiluted) at 2-8°C for one month or (in aliquots) at -20°C for longer.</p> <p>Dilute only prior to immediate use.</p> <p>Avoid cycles of freezing and thawing.</p>
Stability:	Shelf life: One year from despatch.
Gene Name:	interleukin 1 beta
Database Link:	Entrez Gene 3553 Human P01584
Background:	<p>Interleukin 1 (IL1), originally known as lymphocyte activating factor (LAF), activates T cells and lymphocytes, which then proliferate and secrete interleukin 2. IL1 is primarily released from stimulated macrophages and monocytes, but also is released from several other cell types, and is thought to play a key role in inflammatory and immune responses. The two closely related agents, interleukin1 alpha (IL1 alpha) and interleukin1 beta (IL1 beta) bind to the same cell surface receptor, elicit nearly identical biological responses and share 25% homology in their amino acid sequence.</p>
Synonyms:	IL-1 beta, IL1B, IL1 beta, IL1F2, Catabolin
Note:	Endotoxin Content: < 10 pg/ml by LAL method.