

Anti-Mouse IL-1 β (RABBIT) Antibody - 210-401-319
Code: 210-401-319

Size: 100 μ g

Product Description: Anti-Mouse IL-1 β (RABBIT) Antibody - 210-401-319

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Lyophilized

Label	Unconjugated
Host	Rabbit
Gene Name	Il1b
Species Reactivity	mouse, rat
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Reconstitution Volume	100 μ L
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	None
Preservative	None
Storage Condition	Store Anti-IL-1 beta antibody at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. 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.
Synonyms	rabbit anti-IL-1 beta antibody, rabbit anti-IL-1b antibody, rabbit anti-Interleukin-1 beta antibody, IL-1 β , catabolin
Application Note	Anti-Mouse IL-1 β has been tested for use in neutralizations, ELISA, radioimmunoassays, flow cytometry, immunohistochemistry, immunoblotting and immunoprecipitation. It recognizes the 17,000 MW mature IL-1 β . For immunoblots, typically, IL-1 β 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-1 β . 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 mouse and rat IL-1 β activity in bioassays. It does not neutralize the biological activity IL-1. It does not neutralize the biological activity of human or primate IL-1 β . 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.
Background	IL-1 beta (also known as Interleukin-1 beta, IL-1 β 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-1 β 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. Anti-IL-1 beta antibody is ideal for investigators involved in Cardiovascular and Immunology research.
Purity And Specificity	This is an IgG preparation of whole rabbit serum purified by DEAE fractionation. This antibody is primarily directed against mature, 17,000 MW mouse IL-1 β and is useful in determining its presence in various assays. The antibody does not recognize human IL-1 β or mouse IL-1 based on a neutralization assay. In ELISA formats and other immunoreactive assays, reactivity occurs with rat IL-1 β . This antibody will recognize 10% of the non-denatured (native) precursor 31,000 MW mouse IL-1 β containing samples but will primarily detect all of the 17,000 MW mature molecule. However, in immunoblot analysis, the usual procedure of heating the sample in SDS with or without reducing agents will facilitate denaturing of the 31,000 MW IL-1 β precursor molecule. Denatured 31,000 precursor IL-1 β will be recognized by this antibody.
Assay Dilutions	User Optimized
ELISA	1:1,000 - 1:5,000
Western Blot	1:500 - 1:2,000
Immunohistochemistry	1:50-1:250
IF Microscopy	1:50-1:250

Neutralization	User Optimized
Flow Cytometry	User Optimized
Other Assays	User Optimized
Expiration	Expiration date is six (6) months from date of opening.
Immunogen	This antibody was prepared by repeated immunizations with recombinant mouse IL-1 β produced in E.coli. The MW of recombinant mouse IL-1 β was 17 kDa.
General Reference	Gray P.W., Glaister D., Chen E., Goeddel D.V., Pennica D. (1986) Two interleukin 1 genes in the mouse: cloning and expression of the cDNA for murine interleukin 1 beta. J. Immunol. 137:3644-3648. Telford J.L., Macchia G., Massone A., Carinci V., Palla E., Melli M. (1986) The murine interleukin 1 beta gene: structure and evolution. Nucleic Acids Res. 14:9955-9963. (1986) Huang J.J., Newton R.C., Rutledge S.J., Horuk R., Matthew J.B., Covington M., Lin Y. (1988) Characterization of murine IL-1 beta. Isolation, expression, and purification. J. Immunol. 140:3838-3843.

Related Products

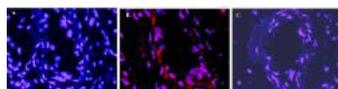
010-001-319	IL-1 β Mouse Recombinant Protein 010-001-319
209-401-301	Anti-Human IL-1 β ; (RABBIT) Antibody - 209-401-301
210-403-319	Anti-Mouse IL-1 β ; (RABBIT) Antibody Peroxidase Conjugated - 210-403-319
210-406-319	Anti-Mouse IL-1 β ; (RABBIT) Antibody Biotin Conjugated - 210-406-319

Related Links

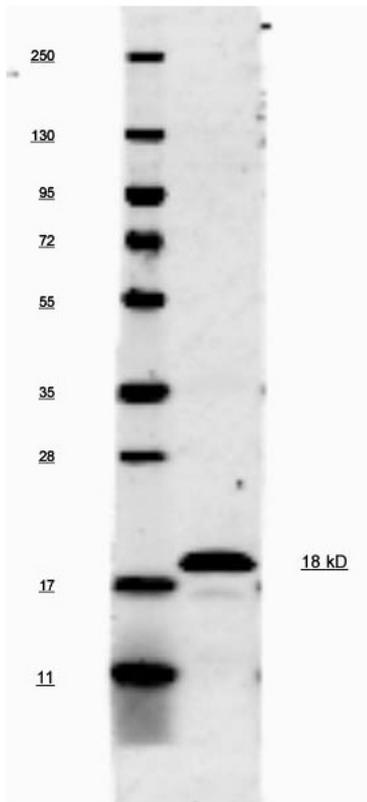
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http://www.uniprot.org/uniprot/P10749	
NCBI - CAA28637.1	http://www.ncbi.nlm.nih.gov/protein/CAA28637.1
	GeneID - 16176

Images

- Immunofluorescence microscopy after staining of mouse carotid artery tissue with anti-Mouse IL-1 β antiserum (less purified form of 210-401-319) diluted 1:50. Tissue sections were prepared after cyrofixation. Reaction occurred at room temperature for 60' followed by washes and reaction with Rhodamine conjugated Gt-a-Rabbit IgG (Rockland code 611-100-122). Tissue was counterstained with bis-benzimide solution at 0.5 mg/ml in PBS for 15 min at room temperature. Panel A) shows no antibody staining of WT uninjured mouse carotid tissue. Panel B) shows anti-IL-1 β staining of cells after surgical injury of tissue. Panel C) shows no antibody staining of injured carotid tissue from an IL-1 β KO mouse.

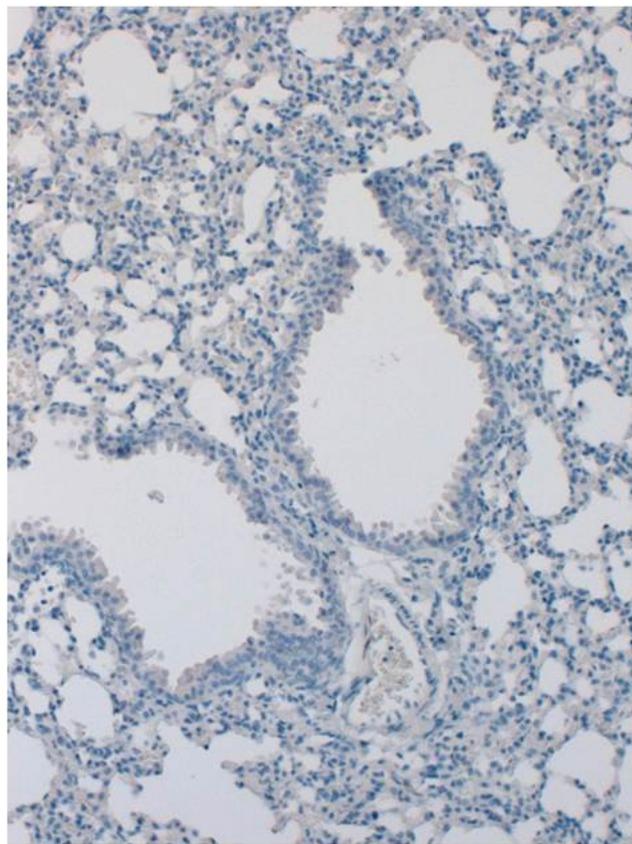
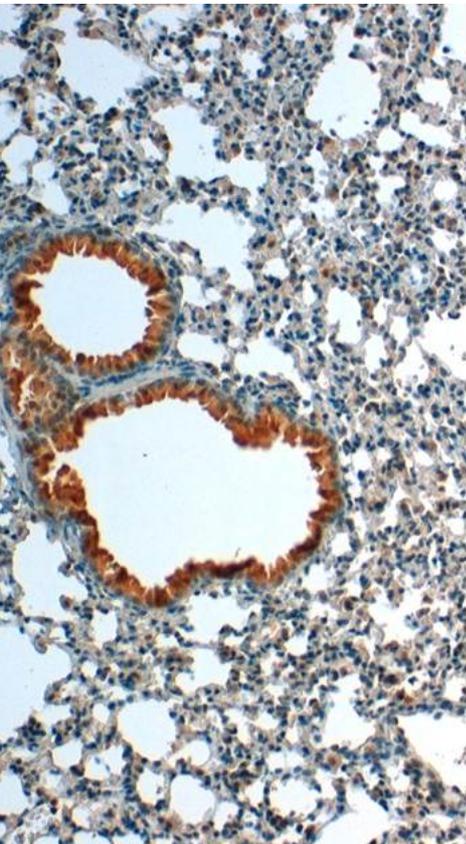


- This antibody will recognize 10% of the non-denatured (native) precursor 31,000 MW mouse IL-1 β containing samples but will primarily detect all of the 17,000 MW mature molecule. However, in western blot analysis, the usual procedure of heating the sample in SDS with or without reducing agents will facilitate denaturing of the 31,000 MW IL-1 β precursor molecule. Denatured IL-1 β will have a 18 kDa band.



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Immunohistochemistry of Rabbit anti-IL1Beta Antibody in Mouse Embryonic Kidney. Tissue: Mouse Embryonic Kidney. Fixation: FFPE buffered formalin 10% conc. Ag Retrieval: Heat, Citrate pH 6.2. Pressure Cooker. Primary antibody: IL1 beta at 2ug/ml for 1.5 hour @ room temp. Secondary Ab: MACH 1 HRP POLYMER at 1:50 for 45" RT.



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This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.