

# Product Datasheet

## IL-1 beta/IL-1F2 Antibody [Biotin] NBP1-42768

Unit Size: 0.1 mg

Store lyophilized antibody at 4C in the dark. Aliquot reconstituted liquid and store at -20C. Avoid freeze-thaw cycles.

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Updated 10/23/2024 v.20.1

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**NBP1-42768**

IL-1 beta/IL-1F2 Antibody [Biotin]

Product Information	
Unit Size	0.1 mg
Concentration	LYOPH mg/ml
Storage	Store lyophilized antibody at 4C in the dark. Aliquot reconstituted liquid and store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.01% Sodium Azide
Reconstitution Instructions	Reconstitute with 100 ul deionized water (or equivalent)
Isotype	IgG
Conjugate	Biotin
Purity	Column Chromatography
Buffer	Lyophilized from 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Product Description	
Description	<p>Store vial at 4C prior to restoration. For extended storage aliquot contents and freeze at -20C 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 4C as an undiluted liquid. Dilute only prior to immediate use.</p> <p>This is an IgG preparation of whole rabbit serum purified by DEAE fractionation</p>
Host	Rabbit
Gene ID	3553
Gene Symbol	IL1B
Species	Mouse, Rat
Specificity/Sensitivity	<p>This antibody is primarily directed against mature, 17,000 MW mouse IL-1beta and is useful in determining its presence in various assays. The antibody does not recognize human IL-1beta or mouse IL-1alpha based on a neutralization assay. In ELISA formats and other immunoreactive assays, reactivity occurs with rat IL-1beta. This antibody will recognize 10% of the non-denatured (native) precursor 31,000 MW mouse IL-1beta 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- 1beta precursor molecule. Denatured 31,000 precursor IL-1beta will be recognized by this antibody.</p>
Immunogen	<p>This IL-1 beta/IL-1F2 Antibody was prepared by repeated immunizations with recombinant mouse IL-1 beta/IL-1F2 produced in E.coli. The MW of recombinant mouse IL-1 beta/IL-1F2 was 17 kDa. (Uniprot: P10749)</p>

Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:2000 - 1:10000, Flow Cytometry 1:10-1:1000, ELISA 1:20000-1:100000, Immunohistochemistry 1:1000-1:5000, Immunohistochemistry-Paraffin 1:10-1:500



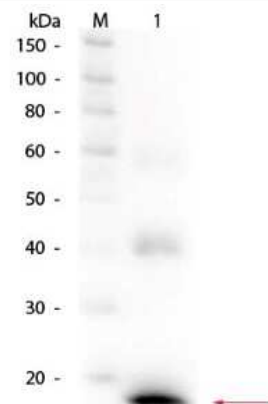
**Application Notes**

This product has been tested in dot blot and western blot and is suitable for use in neutralizations, ELISA, radioimmunoassays, flow cytometry, immunohistochemistry, and immunoprecipitation. It recognizes the 17,000 MW mature IL-1beta. For immunoblots, typically, IL-1beta is detected from supernatants or lysates of  $2 \times 10^6$  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 to reduce background is suggested. For immunohistochemistry either paraffin fixation or cryofixation can be used for sample preparation to stain intracellular IL-1beta. 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-1beta activity in bioassays. It does not neutralize the biological activity IL-1alpha. It does not neutralize the biological activity of human or primate IL-1beta. 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.

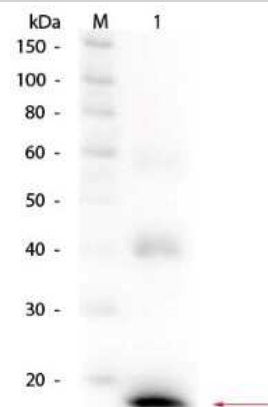


## Images

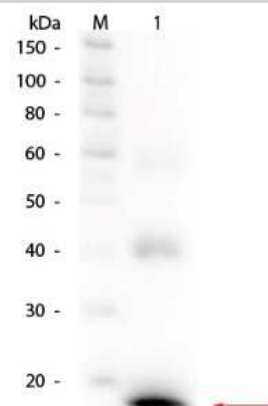
Western Blot: IL-1 beta/IL-1F2 Antibody [Biotin] [NBP1-42768] - Lane 1: Mouse IL-1Beta Recombinant Protein. Load: 50 ng per lane. Primary antibody: Rabbit anti-Mouse IL-1Beta Antibody Biotin Conjugated at 1:1,000 overnight at 4C. Secondary antibody: HRP streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block: incubated with blocking buffer for 30 minutes at RT. Predicted/Observed size: 17.5 kDa, 17.5 kDa for proteolytically processed Mouse IL-1Beta.



Western Blot: IL-1 beta/IL-1F2 Antibody [Biotin] [NBP1-42768] - Lane 1: Mouse IL-1 $\beta$  Recombinant Protein. Load: 50 ng per lane. Used at a dilution of 1:1,000 overnight at 4C.



Western Blot: IL-1 beta/IL-1F2 Antibody [Biotin] [NBP1-42768] - Lane 1: Mouse IL-1Beta Recombinant Protein. Load: 50 ng per lane. Primary antibody: Rabbit anti-Mouse IL-1Beta Antibody Biotin Conjugated at 1:1,000 overnight at 4C. Secondary antibody: HRP streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block: incubated with blocking buffer for 30 minutes at RT. Predicted/Observed size: 17.5 kDa, 17.5 kDa for proteolytically processed Mouse IL-1Beta.



## Publications

Fujisaka S, Usui I, Ikutani M et al. Adipose tissue hypoxia induces inflammatory M1 polarity of macrophages in an HIF-1alpha-dependent and HIF-1alpha-independent manner in obese mice *Diabetologia* 2013-03-15 [PMID: 23494472] (FLOW, Mouse)

Details:

This citation used the Biotin version of this antibody.



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### **Products Related to NBP1-42768**

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NBP2-29370	Streptavidin Native Protein
NBP2-24891B	Rabbit IgG Isotype Control [Biotin]
NBP2-35895-10ug	Recombinant Human IL-1 beta/IL-1F2 Protein
210-TA-005	TNF-alpha [Unconjugated]

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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