

# Product Datasheet

## IL-1 beta/IL-1F2 Antibody - Azide and BSA Free NBP1-42767

Unit Size: 0.1 mg

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

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

**Reviews: 1 Publications: 12**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP1-42767](http://www.novusbio.com/NBP1-42767)

Updated 2/21/2025 v.20.1

Earn rewards for product  
reviews and publications.

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NBP1-42767](http://www.novusbio.com/reviews/destination/NBP1-42767)



**NBP1-42767**

IL-1 beta/IL-1F2 Antibody - Azide and BSA Free

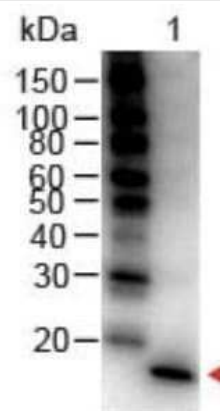
<b>Product Information</b>	
<b>Unit Size</b>	0.1 mg
<b>Concentration</b>	LYOPH mg/ml
<b>Storage</b>	Store lyophilized antibody at 4C. Aliquot reconstituted liquid and store at -20C. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	No Preservative
<b>Reconstitution Instructions</b>	Reconstitute with 100 ul deionized water (or equivalent)
<b>Isotype</b>	IgG
<b>Purity</b>	Column Chromatography
<b>Buffer</b>	Lyophilized from 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Product Description</b>	
<b>Description</b>	This is an IgG preparation of whole rabbit serum purified by DEAE fractionation  Store this antibody 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.
<b>Host</b>	Rabbit
<b>Gene ID</b>	3553
<b>Gene Symbol</b>	IL1B
<b>Species</b>	Mouse, Rat
<b>Specificity/Sensitivity</b>	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.
<b>Immunogen</b>	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)
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Dot Blot, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, CyTOF-ready
<b>Recommended Dilutions</b>	Western Blot 1:500-1:2000, Flow Cytometry 1:10-1:1000, ELISA 1:1000-1:5000, Immunohistochemistry 1:50-1:250, Immunocytochemistry/ Immunofluorescence 1:50-1:250, Immunoprecipitation 1:200-1:800, Immunohistochemistry-Paraffin 1:10-1:500, Dot Blot, CyTOF-ready

**Application Notes**

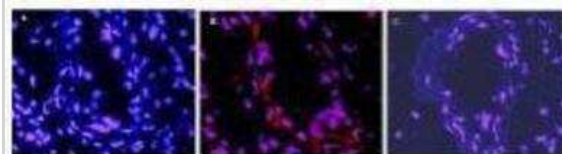
This product has been tested for use in immunohistochemistry, immunoblotting and immunofluorescence. This antibody is useful in ELISA, neutralizations, radioimmunoassays, flow cytometry, and immunoprecipitation. It recognizes the 17,000 MW mature IL-1beta. For immunoblots, typically, IL-1beta is detected 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**

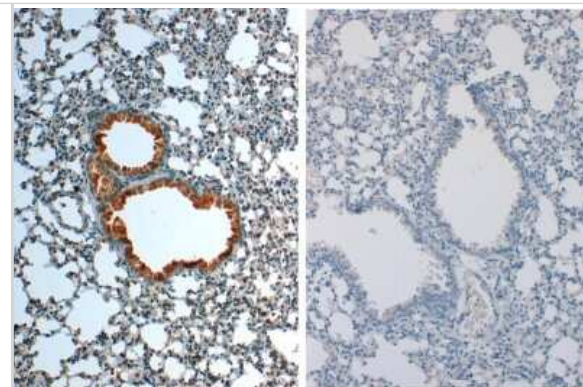
Western Blot: IL-1 beta/IL-1F2 Antibody [NBP1-42767] - Analysis using the HRP conjugate of NBP1-42767. Detection of Lane 1: Mouse IL-1 Beta Load: 50 ug per Detection of Lane Secondary antibody: IL1 beta Antibody Peroxidase conjugated at 1:1,000 for 30 min at RT Block for 30 min RT Predicted/Observed size: 18 kDa, 18 kDa.



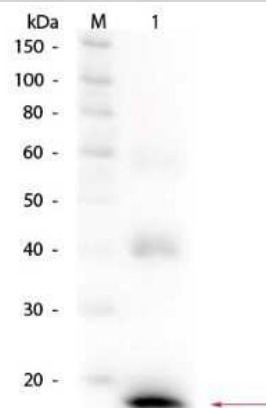
Immunocytochemistry/Immunofluorescence: IL-1 beta/IL-1F2 Antibody [NBP1-42767] - Staining of mouse carotid artery. A) No Ab staining of WT uninjured Ms. B) IL-1 beta staining of cells after surgical injury of tissue. C) No Ab staining of injured tissue from an IL-1 beta KO.



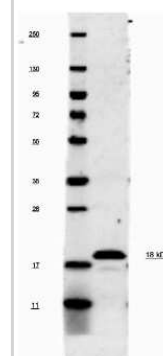
Immunohistochemistry: IL-1 beta/IL-1F2 Antibody [NBP1-42767] - Analysis of Mouse Embryonic Kidney Tissue: Mouse Embryonic Kidney Fixation: FFPE buffered formalin 10% conc Ag Retrieval: Heat, Citrate pH 6.2. Pressure Cooker Primary antibody: 2ug/ml 1.5 hour @ room T Secondary Ab: MACH 1 HRP POLYMER 1:50 45C RT



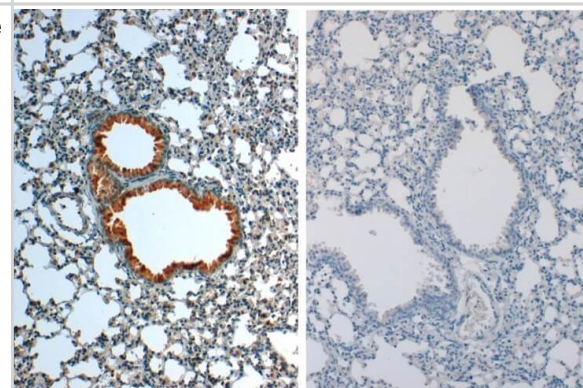
Western Blot: IL-1 beta/IL-1F2 Antibody [NBP1-42767] - Analysis using the Biotin conjugate of NBP1-42767. Detection of Lane 1: Mouse IL-1beta Recombinant Protein. Load: 50 ng per lane. Used at a dilution of 1:1,000 overnight at 4C.



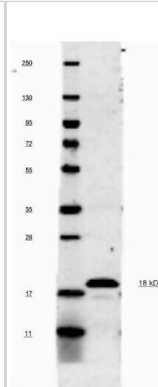
Western Blot: IL-1 beta/IL-1F2 Antibody [NBP1-42767] - Detects 10% of the non-denatured (native) precursor 31,000 MW mouse IL-1Beta containing samples but will primarily detect all of the 17,000 MW mature molecule. However, in western blot analysis, the usual procedure of heating the sample in SDS with or without reducing agents will facilitate denaturing of the 31,000 MW IL- 1Beta precursor molecule. Denatured IL-1Beta will have a 18 kDa band.



Immunohistochemistry of Rabbit anti-IL-1 beta/IL-1F2 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: 2ug/ml 1.5 hour @ room T Secondary Ab: MACH 1 HRP POLYMER 1:50 45" RT



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 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-1beta precursor molecule. Denatured IL-1beta will have a 18 kDa band.



## Publications

Michael Fleischer, Rebecca D Szepanowski, Valeria Pesara, Julia Sophie Bihorac, Beatrice Oehler, Dobromir Dobrev, Christoph Kleinschnitz, Anke C Fender Direct neuronal protection by the protease-activated receptor PAR4 antagonist ML354 after experimental stroke in mice. *British journal of pharmacology* 2024-05-17 [PMID: 38760890]

Wu Z, Liu Y, Huang J et al. MiR-206 inhibits epilepsy and seizure-induced brain injury by targeting CCL2 *Cytotechnology* 2019-06-26 [PMID: 31243650]

Liu M, Liu H, Feng F et al. TRPM7 kinase mediates hypomagnesemia-induced seizure-related death *Scientific reports* 2023-05-15 [PMID: 37188671] (WB, Mouse)

Mavrogiannis E, Hagdorn Q, Bazioti V et al. Pirfenidone ameliorates pulmonary arterial pressure and neointimal remodeling in experimental pulmonary arterial hypertension by suppressing NLRP3 inflammasome activation *Pulmonary Circulation* 2022-06-17 [PMID: 35833096] (WB, Rat)

Morikawa S, Blacher L, Onwumere C, Urano F Loss of Function of WFS1 Causes ER Stress-Mediated Inflammation in Pancreatic Beta-Cells *Frontiers in endocrinology* 2022-03-25 [PMID: 35399956]

Triantafilou K, Ward CJK, Czubala M et al. Differential recognition of HIV-stimulated IL-1beta and IL-18 secretion through NLR and NAIP signalling in monocyte-derived macrophages *PLoS pathogens* 2021-04-16 [PMID: 33861800]

Pilipovic I, Stojic-Vukanic Z, Prijic I et al. Propranolol diminished severity of rat EAE by enhancing immunoregulatory/protective properties of spinal cord microglia *Neurobiol. Dis.* 2019-11-02 [PMID: 31689515] (ICC/IF, Mouse)

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.

Reed M. Requirement of autophagy proteins Beclin-1 and Map1-LC3b in the induction of innate and adaptive immune responses to respiratory syncytial virus infection Thesis. 2014-01-01 (IHC-P, Mouse)

Hardas SS, Sultana R, Warriar G et al. Rat hippocampal responses up to 90 days after a single nanoceria dose extends a hierarchical oxidative stress model for nanoparticle toxicity. *Nanotoxicology* 2013-12-18 [PMID: 24350865] (WB, Rat)

Triantafilou K, Kar S, van Kuppeveld FJ, Triantafilou M. Rhinovirus-Induced Calcium Flux Triggers NLRP3 and NLRC5 Activation in Bronchial Cells. *Am J Respir Cell Mol Biol* 2013-07-01 [PMID: 23815151]

Triantafilou K, Kar S, Vakakis E et al. Human respiratory syncytial virus viroporin SH: a viral recognition pathway used by the host to signal inflammasome activation *Thorax* 2013-01-01 [PMID: 23229815]



### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NBP1-42767**

---

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NBP2-35895-10ug	Recombinant Human IL-1 beta/IL-1F2 Protein

---

### **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.

For more information on our 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NBP1-42767](http://www.novusbio.com/reviews/submit/NBP1-42767)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

