

# Product Datasheet

## Myosin VB Antibody NBP1-87746

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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



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

**Publications: 15**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP1-87746](http://www.novusbio.com/NBP1-87746)

Updated 11/9/2023 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/NBP1-87746](http://www.novusbio.com/reviews/destination/NBP1-87746)



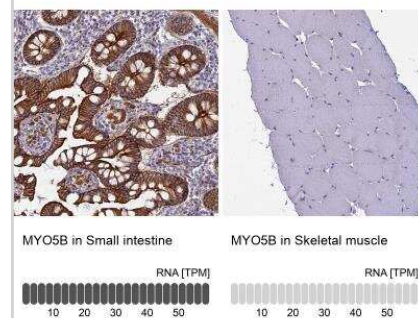
**NBP1-87746**

Myosin VB Antibody

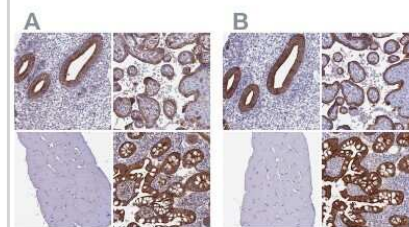
Product Information	
<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.02% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Immunogen affinity purified
<b>Buffer</b>	PBS (pH 7.2) and 40% Glycerol
Product Description	
<b>Host</b>	Rabbit
<b>Gene ID</b>	4645
<b>Gene Symbol</b>	MYO5B
<b>Species</b>	Human, Mouse, Rat
<b>Reactivity Notes</b>	Mouse reactivity reported in scientific literature (PMID: 26201991). Use in Rat reported in scientific literature (PMID:31757887).
<b>Immunogen</b>	This antibody was developed against Recombinant Protein corresponding to amino acids: NLMKKELEEERSRYQNLVKEYSQLEQRYDNLRDGMTIHKQTPGHRNPSNQSS LESDSNYPSTSEIGDTEALQQVEEIGLEKAAMDMTVFLK
Product Application Details	
<b>Applications</b>	Western Blot, Simple Western, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Knockout Validated
<b>Recommended Dilutions</b>	Western Blot -Reported in scientific literature (PMID: 27229121), Simple Western 1:100, Immunohistochemistry 1:200 - 1:500, Immunocytochemistry/Immunofluorescence -Reported in scientific literature (PMID: 27229121) , Immunohistochemistry-Paraffin 1:200 - 1:500, Knockout Validated -Validation (PMID: 31664880)
<b>Application Notes</b>	For IHC-Paraffin, HIER pH 6 retrieval is recommended. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. Separated by Size-Wes, Sally Sue/Peggy Sue.

## Images

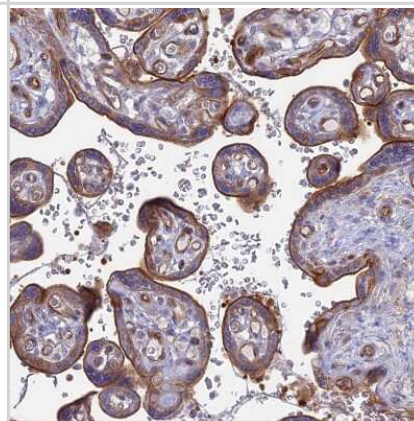
Immunohistochemistry-Paraffin: Myosin VB Antibody [NBP1-87746] - Staining in human small intestine and skeletal muscle tissues . Corresponding MYO5B RNA-seq data are presented for the same tissues.



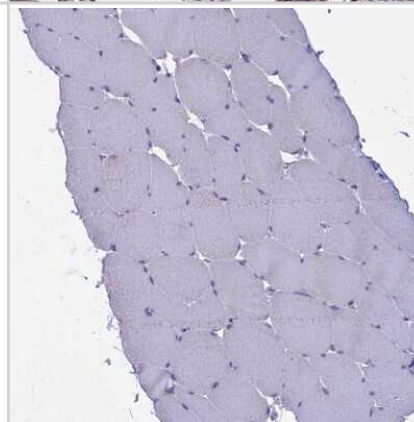
Immunohistochemistry-Paraffin: Myosin VB Antibody [NBP1-87746] - Staining of human endometrium, placenta, skeletal muscle and small intestine using Anti-MYO5B antibody NBP1-87746 (A) shows similar protein distribution across tissues to independent antibody NBP1-87747 (B).



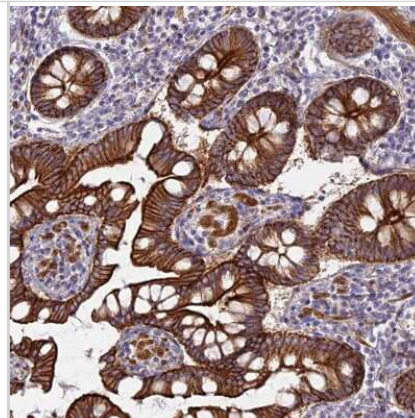
Immunohistochemistry-Paraffin: Myosin VB Antibody [NBP1-87746] - Staining of human placenta shows moderate to strong cytoplasmic positivity in trophoblastic cells.



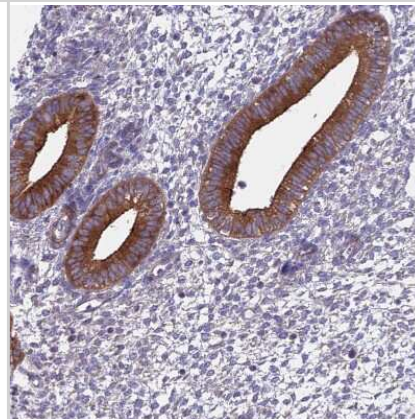
Immunohistochemistry-Paraffin: Myosin VB Antibody [NBP1-87746] - Staining of human skeletal muscle shows no positivity in myocytes as expected.



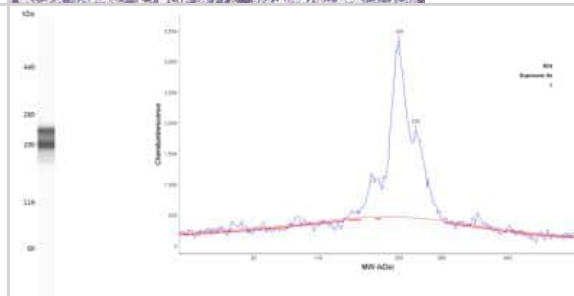
Immunohistochemistry-Paraffin: Myosin VB Antibody [NBP1-87746] - Staining of human small intestine shows moderate to strong cytoplasmic positivity in glandular cells.



Immunohistochemistry-Paraffin: Myosin VB Antibody [NBP1-87746] - Staining of human endometrium shows strong cytoplasmic positivity in glandular cells.



Simple Western: Myosin VB Antibody [NBP1-87746] - Analysis in RT4 at 0.2 mg/mL.



## Publications

Leijnse N, Barooji YF, Arastoo MR et al. Filopodia rotate and coil by actively generating twist in their actin shaft Nature Communications 2022-03-28 [PMID: 35347113] (B/N)

Gromova KV, Thies E, Janiesch PC et al. The kinesin Kif21b binds myosin Va and mediates changes in actin dynamics underlying homeostatic synaptic downscaling Cell reports 2023-07-25 [PMID: 37418322] (WB, Mouse)

Zhao G, Liu S, Arun S et al. A tubule-sheet continuum model for the mechanism of nuclear envelope assembly Developmental cell 2023-04-24 [PMID: 37098350] (WB, Human)

Engevik KA, Engevik MA, Engevik AC Bioinformatics reveal elevated levels of Myosin Vb in uterine corpus endometrial carcinoma patients which correlates to increased cell metabolism and poor prognosis PloS one 2023-01-20 [PMID: 36662766] (IHC-P, Human)

Ahsan MK, Dos Reis DC, Barbieri A et al. Loss of Serum Glucocorticoid-Inducible Kinase 1 SGK1 Worsens Malabsorption and Diarrhea in Microvillus Inclusion Disease (MVID) Journal of clinical medicine 2022-07-19 [PMID: 35887942] (IHC-P, Mouse)

Sakai T, Choo Y, Sato O et al. Myo5b Transports Fibronectin-Containing Vesicles and Facilitates FN1 Secretion from Human Pleural Mesothelial Cells International Journal of Molecular Sciences [PMID: 35563212]

Li Q, Zhou Z, Sun Y et al. A Functional Relationship Between UNC45A and MYO5B Connects Two Rare Diseases With Shared Enteropathy Cellular and molecular gastroenterology and hepatology 2022-04-11 [PMID: 35421597] (ICC/IF)

Schneeberger, K, Vogel, G F Et al. An inducible mouse model for microvillus inclusion disease reveals a role for myosin Vb in apical and basolateral trafficking. Proc Natl Acad Sci U S A 2015-10-06 [PMID: 26392529] (WB, Mouse)

Royo M, Gutierrez Y et al. A retention-release mechanism based on RAB11FIP2 for AMPA receptor synaptic delivery during long-term potentiation. J Cell Sci 2019-12-16 [PMID: 31757887] (ICC/IF, Rat)

Engevik AC, Coutts AW, Kaji I et al. Editing Myosin VB Gene to Create Porcine Model of Microvillus Inclusion Disease, With Microvillus-Lined Inclusions and Alterations in Sodium Transporters Gastroenterology 2020-02-26 [PMID: 32112796]

Forteza R, Ahsan MK, CartOn-Garcla F et al. Glucocorticoids and Myosin5b loss-of-function induce heightened PKA signaling in addition to membrane traffic defects Mol. Biol. Cell 2019-10-30 [PMID: 31664880] (KO, Human, Mouse)

Xu, W;Gulvady, AC;Goreczny, GJ;Olson, EC;Turner, CE; Paxillin-dependent regulation of apical-basal polarity in mammary gland morphogenesis Development 2019-04-09 [PMID: 30967426] (WB, Mouse)

More publications at <http://www.novusbio.com/NBP1-87746>



### **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 NBP1-87746**

---

NBP1-87746PEP	Myosin VB Recombinant Protein Antigen
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

---

### **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/NBP1-87746](http://www.novusbio.com/reviews/submit/NBP1-87746)

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

