

# Product Datasheet

## Panendothelial Cell Antigen Antibody (MECA-32) - BSA Free NB100-77668

Unit Size: 0.5 mg

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: 29**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NB100-77668](http://www.novusbio.com/NB100-77668)

Updated 9/9/2025 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/NB100-77668](http://www.novusbio.com/reviews/destination/NB100-77668)

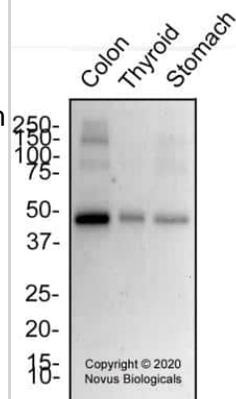


**NB100-77668****Panendothelial Cell Antigen Antibody (MECA-32) - BSA Free**

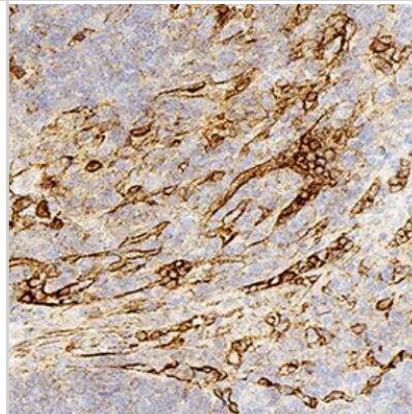
| <b>Product Information</b>         |  |
|------------------------------------|--|
| <b>Unit Size</b>                   | 0.5 mg   |
| <b>Concentration</b>               | 1.0 mg/ml  |
| <b>Storage</b>                     | Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.   |
| <b>Clonality</b>                   | Monoclonal   |
| <b>Clone</b>                       | MECA-32  |
| <b>Preservative</b>                | 0.02% Sodium Azide   |
| <b>Isotype</b>                     | IgG2a Kappa  |
| <b>Purity</b>                      | Protein G purified   |
| <b>Buffer</b>                      | PBS  |
| <b>Product Description</b>         |  |
| <b>Description</b>                 | Novus Biologicals Rat Panendothelial Cell Antigen Antibody (MECA-32) - BSA Free (NB100-77668) is a monoclonal antibody validated for use in IHC, WB, Flow, ICC/IF and IP. Anti-Panendothelial Cell Antigen Antibody: Cited in 27 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.   |
| <b>Host</b>                        | Rat  |
| <b>Gene ID</b>                     | 84094  |
| <b>Gene Symbol</b>                 | Plvap  |
| <b>Species</b>                     | Human, Mouse   |
| <b>Specificity/Sensitivity</b>     | Pan endothelial cells except for CNS & muscle capillaries.   |
| <b>Immunogen</b>                   | Mouse lymph node stromal cells.  |
| <b>Product Application Details</b> |  |
| <b>Applications</b>                | Western Blot, Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation, CyTOF-ready  |
| <b>Recommended Dilutions</b>       | Western Blot 2 ug/ml, Flow Cytometry &lt;= 0.25 ug/10 <sup>6</sup> cells in 100 ul, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunoprecipitation 1:10-1:500, Immunohistochemistry-Paraffin 1:200 - 1:500. Use reported in scientific literature (PMID 26586691), Immunohistochemistry-Frozen 1:10-1:500, CyTOF-ready |
| <b>Application Notes</b>           | There have been mixed results for use in Immunohistochemistry on paraffin-embedded sections.   |

## Images

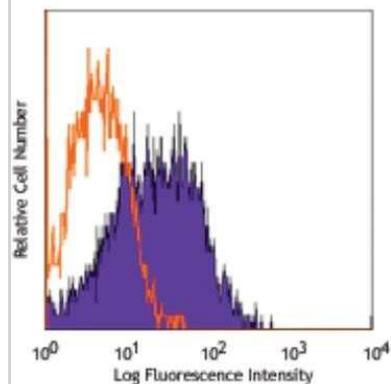
**Western Blot: Panendothelial Cell Antigen Antibody (MECA-32) [NB100-77668]** - Total protein from human Colon, Thyroid and Stomach was separated on a 12% gel by SDS-PAGE, transferred to PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 2.0 ug/ml anti-Panendothelial Cell Antigen (NB100-77668) in blocking buffer and detected with an anti-rat HRP secondary antibody using NovaLume chemiluminescence detection reagent (NPB2-61915).



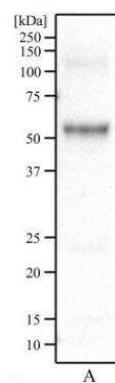
**Immunohistochemistry-Paraffin: Panendothelial Cell Antigen Antibody (MECA-32) [NB100-77668]** - Panendothelial Cell Antigen (MECA-32) was detected in immersion fixed paraffin-embedded sections of human spleen. Antibody at 1:500 for 1 hour at room temperature followed by incubation with the Anti-Rat IgG VisUCyte(TM) HRP Polymer Antibody (Catalog # VC005). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the endothelial cells.



**Flow Cytometry: Panendothelial Cell Antigen Antibody (MECA-32) [NB100-77668]** - Analysis using the PerCP conjugate of NB100-77668. Staining of bEND.3 cells with MECA-32 AF488.



**Western Blot: Panendothelial Cell Antigen Antibody (MECA-32) [NB100-77668]** - Mouse embryonic cell lysate (A). Antibody at 2 ug/mL.



## Publications

Ranjan P, Goswami S, Dutta R et al. Hypertrophic heart failure promotes gut dysbiosis and gut leakage in interleukin 10-deficient mice *American journal of physiology. Heart and circulatory physiology* 2025-03-01 [PMID: 39854049]

Renner B, Laskowski J, Poppelaars F et al. Annexin A2 interferes with complement regulation within the glomerulus. *The Journal of biological chemistry* 2025-08-30 [PMID: 40889685]

Kushwaha R, Li Y, Makarava N et al. Reactive astrocytes associated with prion disease impair the blood brain barrier *Neurobiology of Disease* 2023-09-01 [PMID: 37597815] (Immunohistochemistry-Paraffin, Mouse)

Laura Trefzer, Maria E Hess, Lena Scholten, Kristin Technau-Hafsi, Frank Meiss, Melanie Boerries, Cristina Has, David Rafei-Shamsabadi Variable Outcome of Immunotherapy in Advanced Multiple Cutaneous Squamous Cell Carcinomas in Two Patients with Recessive Dystrophic Epidermolysis Bullosa. *Acta dermato-venereologica* 2023-06-21 [PMID: 37338146]

KB Jung, H Lee, YS Son, MO Lee, YD Kim, SJ Oh, O Kwon, S Cho, HS Cho, DS Kim, JH Oh, M Zilbauer, JK Min, CR Jung, J Kim, MY Son Interleukin-2 induces the in vitro maturation of human pluripotent stem cell-derived intestinal organoids *Nat Commun*, 2018-08-02;9(1):3039. 2018-08-02 [PMID: 30072687]

Stokes ME, Calvo V, Fujisawa S et al. PERK Inhibition by HC-5404 Sensitizes Renal Cell Carcinoma Tumor Models to Antiangiogenic Tyrosine Kinase Inhibitors *Clinical cancer research : an official journal of the American Association for Cancer Research* 2023-09-21 [PMID: 37733811] (IHC-P, Mouse)

Prasad R, Adu-Agyeiwaah Y, Floyd JL et al. Sustained ACE2 Expression by Probiotic Improves Integrity of Intestinal Lymphatics and Retinopathy in Type 1 Diabetic Model *Journal of clinical medicine* 2023-02-23 [PMID: 36902558] (IHC-P, Mouse)

Wang X, Zhou Y, Sun Q et al. Thymosin  $\beta$ 4 exerts cytoprotective function and attenuates liver injury in murine hepatic sinusoidal obstruction syndrome after hematopoietic stem cell transplantation *Transplantation and cellular therapy* 2023-05-14 [PMID: 37192732] (IHC, Mouse)

Xu L, Nirwane A, Xu T et al. Fibroblasts repair blood-brain barrier damage and hemorrhagic brain injury via TIMP2 *Cell reports* 2022-11-22 [PMID: 36417884] (WB, Mouse)

Zhu S, Liang J, Zhu F et al. The effects of myeloablative or non-myeloablative total body irradiations on intestinal tract in mice *Bioscience reports* 2021-03-26 [PMID: 33605406] (IHC-Fr, Mouse)

Vanslambrouck J M, Wilson S B et al. A Toolbox to Characterize Human Induced Pluripotent Stem Cell-Derived Kidney Cell Types and Organoids. *J Am Soc Nephrol* 2019-01-10 [PMID: 31492807] (IF/IHC, Mouse)

Noval Rivas M, Wakita D, Franklin MK et al. Intestinal Permeability and IgA Provoke Immune Vasculitis Linked to Cardiovascular Inflammation *Immunity* 2019-09-17 [PMID: 31471109]

More publications at <http://www.novusbio.com/NB100-77668>



## Procedures

### Western Blot Protocol for Panendothelial Cell Antigen Antibody (NB100-77668)

#### Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 10-25 ug of total protein per lane.
2. Transfer proteins to PVDF membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain the membrane with Ponceau S (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot TBS -0.05% Tween 20 (TBST).
5. Block the membrane in 5% Non-fat milk in TBST (blocking buffer) for at least 1 hour.
6. Wash the membrane in TBST three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate overnight at 4C with gentle rocking.
8. Wash the membrane in TBST three times for 10 minutes each.
9. Incubate the membrane in diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) for 1 hour at room temperature.
10. Wash the blot in TBST three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructi

### Immunohistochemistry-Paraffin Protocol for Panendothelial Cell Antigen Antibody (NB100-77668)

#### Immunohistochemistry-Paraffin Embedded Sections

##### Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes (keep slides in the sodium citrate buffer all the time).

##### Staining:

1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in PBS for 5 minutes.
3. Block each section with 100-400 ul blocking solution (1% BSA in PBS) for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul HRP polymer conjugated secondary antibody. Incubate 30 minutes at room temperature.
7. Wash sections three times in wash buffer for 5 minutes each.
8. Add 100-400 ul DAB substrate to each section and monitor staining closely.
9. As soon as the sections develop, immerse slides in deionized water.
10. Counterstain sections in hematoxylin.
11. Wash sections in deionized water two times for 5 minutes each.
12. Dehydrate sections.
13. Mount coverslips.





### **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 NB100-77668**

---

|                  |   |
|------------------|---|
| NBP2-33376H      | Blue Marker Antibody (6F4-F6) [HRP]               |
| HAF005           | Goat anti-Rat IgG Secondary Antibody [HRP]        |
| NB7115           | Goat anti-Rat IgG (H+L) Secondary Antibody [HRP]  |
| NBP1-43321-0.5mg | Rat IgG2a Kappa Light Chain Isotype Control (R2a) |

---

### **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/NB100-77668](http://www.novusbio.com/reviews/submit/NB100-77668)

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

