Product Datasheet

PARD3/Par3 Antibody - BSA Free
NBP1-88861

Unit Size: 0.1 ml

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

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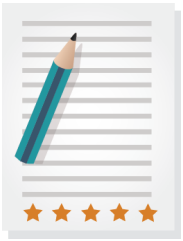
Reviews: 2 Publications: 11

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-88861

Updated 9/9/2025 v.20.1



NBP1-88861

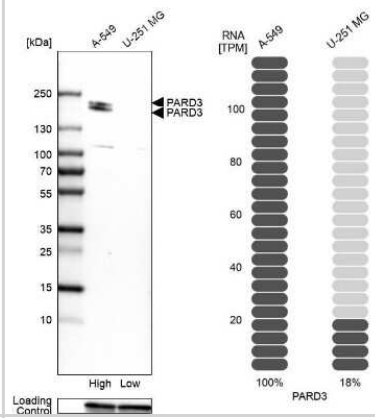
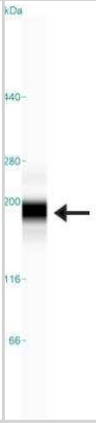
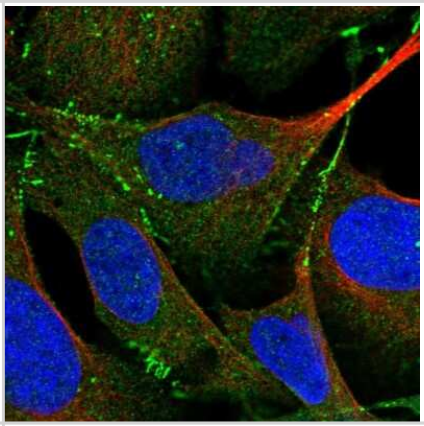
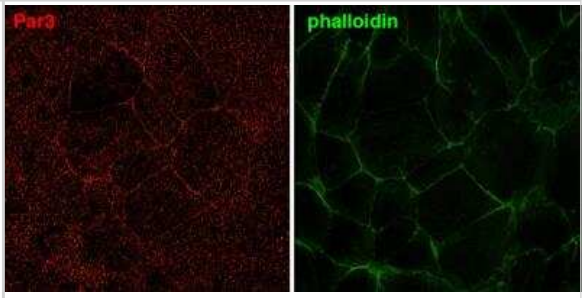
PARD3/Par3 Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol

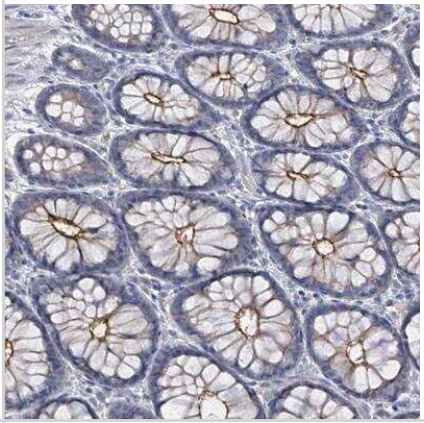
Product Description	
Description	Novus Biologicals Rabbit PARD3/Par3 Antibody - BSA Free (NBP1-88861) is a polyclonal antibody validated for use in IHC, WB, ICC/IF, Simple Western and IP. Anti-PARD3/Par3 Antibody: Cited in 10 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	56288
Gene Symbol	PARD3
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported from a verified customer review.
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: LKGLGDMFRIQAKTREFRERQARERDYAEIQDFHRTFGCDDELMYGGVSSYE GSMALNARPQSPREGHMMDALYAQVKKPRNSKPSPVDSNR

Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation
Recommended Dilutions	Western Blot 0.04-0.4 ug/ml, Simple Western 1:100, Immunohistochemistry 1:200 - 1:500, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunoprecipitation Reported in scientific literature (PMID:34158849)., Immunohistochemistry-Paraffin 1:200-1:500
Application Notes	ICC/IF Fixation Permeabilization: Use PFA/Triton X-100. IHC-Paraffin HIER pH6 retrieval is recommended. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See Simple Western Antibody Database for Simple Western validation: Tested in RT-4, separated by Size, antibody dilution of 1:100, apparent MW was 190 kDa

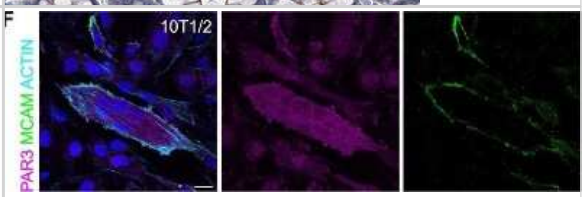
Images

Western Blot: PARD3/Par3 Antibody [NBP1-88861] - Analysis in human cell lines A-549 and U-251MG. Corresponding RNA-seq data are presented for the same cell lines. Loading control: Anti-GAPDH.	
Simple Western: PARD3/Par3 Antibody [NBP1-88861] - Simple Western lane view shows a specific band for PARD3/Par3 in 0.2 mg/ml of RT-4 lysate. This experiment was performed under reducing conditions using the 66-440 kDa separation system.	
Immunocytochemistry/Immunofluorescence: PARD3/Par3 Antibody [NBP1-88861] - Staining of human cell line U-2 OS shows localization to cell junctions. Antibody staining is shown in green.	
Immunocytochemistry/Immunofluorescence: PARD3/Par3 Antibody [NBP1-88861] - Staining PARD3 in mouse trophoblast stem cells. Verified customer review from 1DegreeBio.	

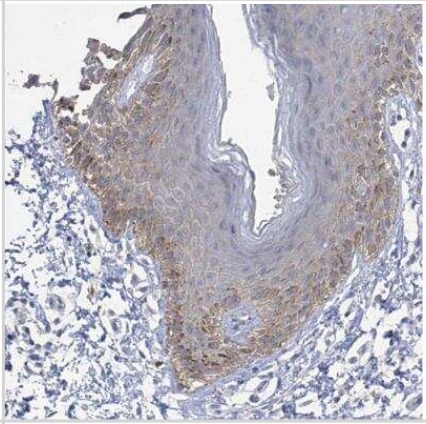
Immunohistochemistry-Paraffin: PARD3/Par3 Antibody [NBP1-88861] - Staining of human colon shows distinct luminal membranous positivity in glandular cells.



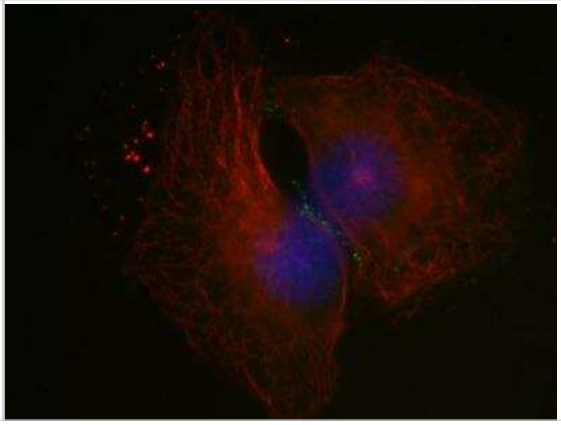
Immunocytochemistry/Immunofluorescence: PARD3/Par3 Antibody [NBP1-88861] - MCAM is required to establish cell autonomous polarity. In wild-type myotubes PAR3 remains cytoplasmic. MCAM contributes to the establishment of cell autonomous polarity in myogenic and chondrogenic differentiation. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/28923978/) licensed under a CC-BY license.

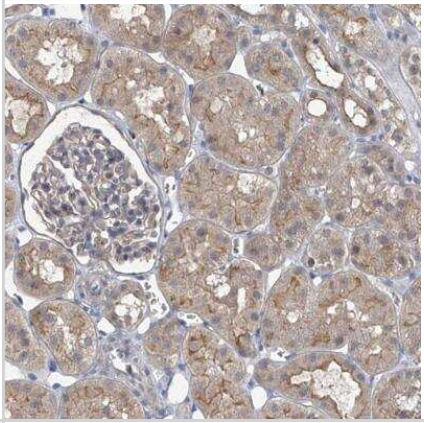
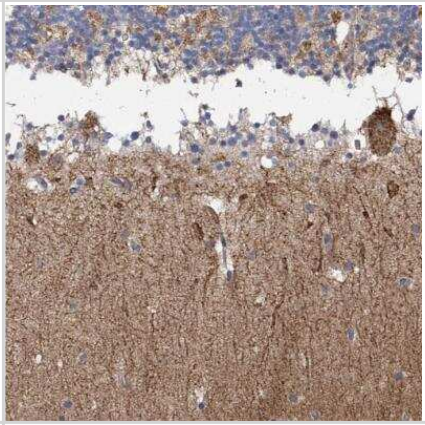
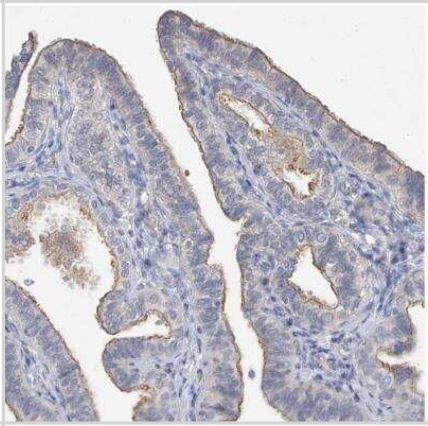
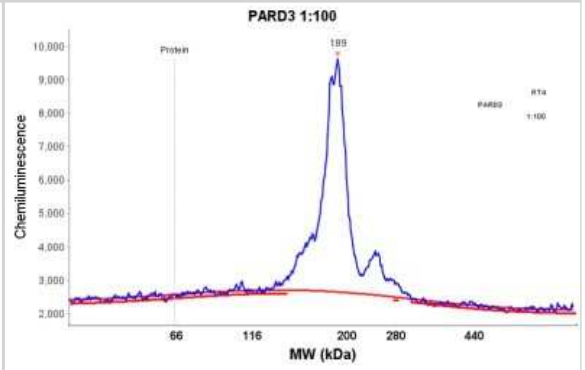


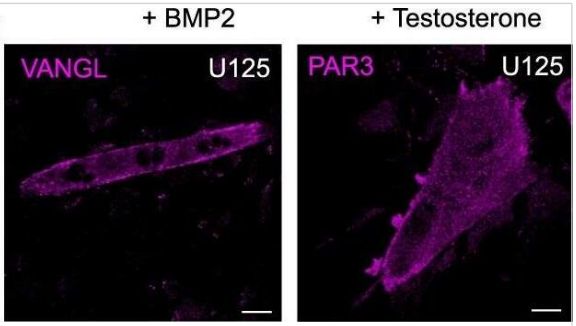
Immunohistochemistry-Paraffin: PARD3/Par3 Antibody [NBP1-88861] - Staining of human skin shows weak to moderate cytoplasmic positivity in epidermal cells.



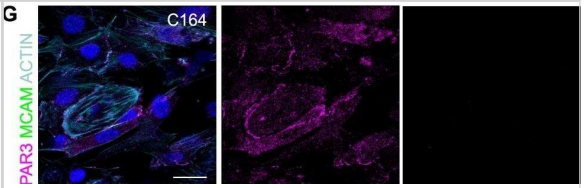
Immunocytochemistry/Immunofluorescence: PARD3/Par3 Antibody [NBP1-88861] - Staining of human cell line 8505C cells (anaplastic thyroid cancer cell line). Image from verified customer review.



Immunohistochemistry-Paraffin: PARD3/Par3 Antibody [NBP1-88861] - Staining of human kidney shows weak to moderate membranous positivity in cells in tubules.	
Immunohistochemistry-Paraffin: PARD3/Par3 Antibody [NBP1-88861] - Staining of human cerebellum shows moderate positivity in neuropil.	
Immunohistochemistry-Paraffin: PARD3/Par3 Antibody [NBP1-88861] - Staining of human fallopian tube shows weak to moderate positivity in luminal membrane in glandular cells.	
Simple Western: PARD3/Par3 Antibody [NBP1-88861] - Electropherogram image(s) of corresponding Simple Western lane view. PARD3/Par3 antibody was used at 1:100 dilution on RT-4 lysate(s).	



Immunocytochemistry/ Immunofluorescence: PARD3/Par3 Antibody [NBP1-88861] - MCAM is required to establish cell autonomous polarity. (A) In elongating myotubes (10T1/2 cells treated with testosterone for 7 days) VANGL2 is localized asymmetrically at the tip of the cell. (B) The VANGL2 enriched tip of the cell is marked by MSN. (C) In MCAM knockout C164 cells myotube elongation fails, MSN labels the whole plasma membrane & VANGL2 is spread across the cytoplasm. (D) Highly polarized localization of MCAM & SCRIB at the distal end of growing wild-type myotube. Separate channels of the boxed area are shown on the right. (E) In MCAM knockout cells SCRIB levels remain low & it is spread evenly in the cell. (F) In wild-type myotubes PAR3 remains cytoplasmic, whereas (G) in MCAM knockout C164 cells it can be detected at the cell cortex. (H) RT-qPCR demonstrates reduced expression of Scrib in MCAM mutant cell lines. Cells were treated for 7 days with BMP2 or testosterone (n=3; **P<0.01; ***P<0.001; two-tailed t-test; mean±s.e.m.). (I) Deletion of MCAM endocytosis motif leads to similar polarity defects as complete MCAM elimination. VANGL2 is evenly spread in U125 cells & PAR3 accumulates in cell cortex. (J) In chondrogenic differentiation VANGL2 was observed asymmetrically in limited number of cells. In MCAM mutant cell lines (C149, C164, U125) VANGL2 accumulated around the nucleus. (K) Initiation of myogenic (4-day culture with testosterone) & chondrogenic differentiation (4-day culture with BMP2) led to downregulation of ERK1/2 phosphorylation (p-ERK1/2). Instead in MCAM mutant cell lines ERK1/2 phosphorylation increased. Scale bars: 25 µm. Image collected & cropped by CiteAb from the following publication (https://journals.biologists.com/bio/article/doi/10.1242/bio.027771/256759/MCAM-contributes-to-the-establishment-of-cell), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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Publications

Lee S, Balcazar J, Davis K et al. The polarity protein Par3 enhances renal cell carcinoma metastasis via YAP/TAZ activation Cancer Biology & Medicine 2025-07-15 [PMID: 40626835]

Ling J, Sckaff M, Tiwari M et al. RAS-mediated suppression of PAR3 and its effects on SCC initiation and tissue architecture occur independently of hyperplasia Journal of Cell Science 2020-05-18 [PMID: 33172988] (Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Mouse)

Wang J, Cheng X, Mei X et al. The effect of Par3 on the cellular junctions and biological functions of odontoblast-lineage cells Odontology 2023-07-26 [PMID: 37493885]

Das A, Adhikary S, Chowdhury AR Et al. Leveraging Substrate Stiffness to Promote Stem Cell Asymmetric Division via Mechanotransduction-Polarity Protein Axis and Its Bayesian Regression Analysis Rejuvenation Res 2022-03-22 [PMID: 35316074] (ICC/IF)

Details:
Citation using the Texas Red version of this antibody.

Heinrich A, Bhandary B, Potter SJ Et al. Cdc42 activity in Sertoli cells is essential for maintenance of spermatogenesis Cell reports 2021-10-26 [PMID: 34706238] (IHC-Fr, Mouse)

Zhou Y, Ji H, Xu Q et al. Congenital biliary atresia is correlated with disrupted cell junctions and polarity caused by Cdc42 insufficiency in the liver Theranostics 2021-05-24 [PMID: 34158849] (IP, Mouse)

Engevik AC, Krystofiak ES, Kaji I et al. Recruitment of Polarity Complexes and Tight Junction Proteins to the Site of Apical Bulk Endocytosis Cellular and molecular gastroenterology and hepatology 2021-02-03 [PMID: 33548596] (IHC-P, Mouse)

Heinrich A, Potter SJ, Guo L et al. Distinct Roles for Rac1 in Sertoli Cell Function during Testicular Development and Spermatogenesis Cell Rep 2020-04-14 [PMID: 32294451] (IF/IHC, Human)

Moreno-Fortuny A, Bragg L, Cossu G, Roostalu U. MCAM contributes to the establishment of cell autonomous polarity in myogenic and chondrogenic differentiation. Biol Open. 2017-09-18 [PMID: 28923978] (ICC/IF)

Tuccilli C, Baldini E, Arlot-Bonnemains Y et al. Expression and prognostic value of the cell polarity PAR complex members in thyroid cancer. Int J Oncol 2017-03-08 [PMID: 28350047]

Whiteman EL, Fan S, Harder JL et al. Crumbs3 is Essential for Proper Epithelial Development and Viability. Mol Cell Biol. 2013-10-28 [PMID: 24164893] (IF/IHC, ICC/IF, Mouse)

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Products Related to NBP1-88861

NBP1-88861PEP	PARD3/Par3 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.

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