Product Datasheet

GLUT9 Antibody - BSA Free
NBP1-05054

Unit Size: 0.1 ml

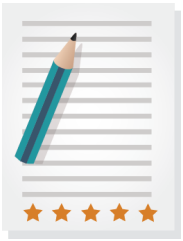
Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

www.novusbio.com technical@novusbio.com

Reviews: 1 Publications: 6

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-05054

Updated 7/1/2024 v.20.1



NBP1-05054

GLUT9 Antibody - BSA Free

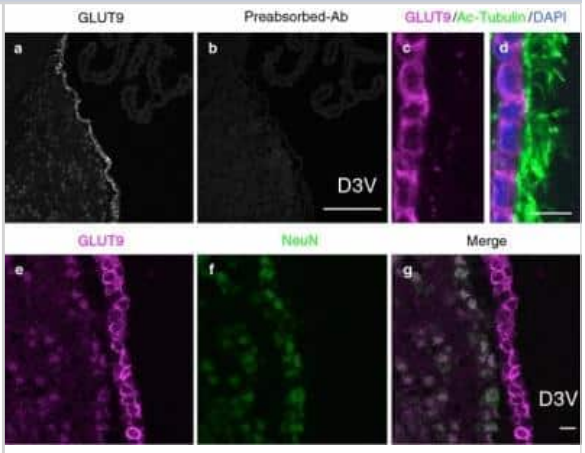
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Target Molecular Weight	55 kDa

Product Description	
Host	Rabbit
Gene ID	56606
Gene Symbol	SLC2A9
Species	Human, Mouse
Immunogen	Synthetic peptide made to an internal portion of human GLUT9 (within residues 500-550). [Swiss-Prot# Q9NRM0]

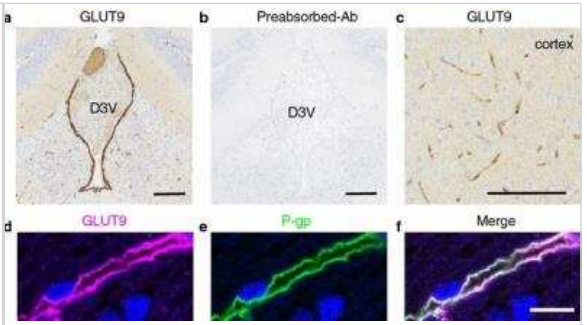
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.5 ug/ml, Immunohistochemistry 1:200, Immunocytochemistry/ Immunofluorescence 1:200, Immunohistochemistry-Paraffin 1:200
Application Notes	This GLUT9 antibody is useful for Western blot, where a band is seen ~ 55 kDa. The immunogen of this product corresponds to a cytoplasmic domain of GLUT9 protein and in immunostaining assays, cytoplasmic-membrane staining may be expected for this product. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

Images

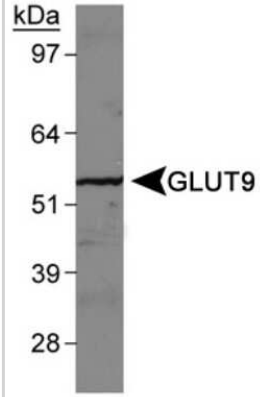
Immunohistochemistry: GLUT9 Antibody [NBP1-05054] - Immunofluorescence staining of GLUT9 in PFA-fixed murine brain sections. Frozen sections of paraformaldehyde-fixed wild-type murine brain were used for immunofluorescence staining. a, b Antigen absorption test. Immunofluorescence staining of the ependymal wall of the dorsal third ventricle using a anti-GLUT9 antibody and b antigen-preabsorbed antibody. Scale bar 100 um. c, d Immunofluorescence staining of GLUT9 (magenta), acetylated-tubulin (Ac-Tubulin, green) and DAPI (blue) on ependymal cells. Scale bar 10 um. e-g Immunofluorescence staining of GLUT9 (magenta) and NeuN (green) showing co-localization in neurons. Scale bar 10 um. Image collected and cropped by CiteAb from the following publication (https://fluidsbarrierscns.biomedcentral.com/articles/10.1186/s12987-016-0046-x) licensed under a CC-BY license.



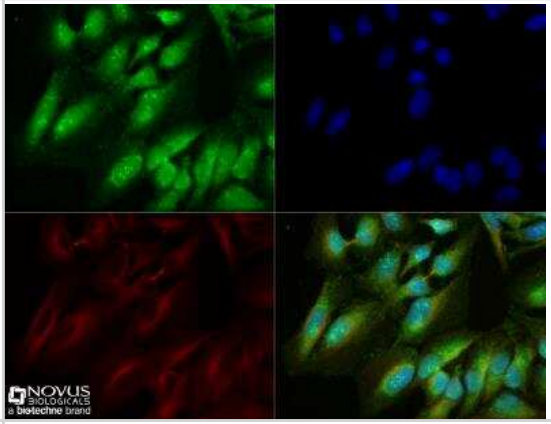
Immunohistochemistry: GLUT9 Antibody [NBP1-05054] - GLUT9 in methacarn-fixed murine brain. Paraffin sections of methacarn-fixed murine brain were used for immunostaining. a, b Antigen absorption test. Immunohistochemistry using showing a anti-GLUT9 antibody staining in the third ventricle ependyma and parenchyma and b antigen-preabsorbed antibody. Scale bar 100 um. c GLUT9 immunoreactivity observed in brain capillaries in the cortex. Scale bar 100 um. d-f Immunofluorescence staining of d GLUT9 and e P-gp showing co-localization in capillaries. Blue indicates DAPI-stained nucleus of the brain capillary endothelial cell. Scale bar 10 um.Image collected and cropped by CiteAb from the following publication (https://fluidsbarrierscns.biomedcentral.com/articles/10.1186/s12987-016-0046-x) licensed under a CC-BY license.



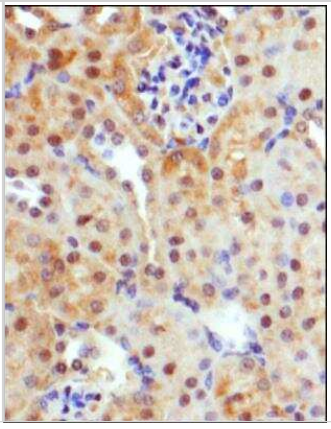
Western Blot: GLUT9 Antibody [NBP1-05054] - Detection of GLUT9 in human kidney membrane.



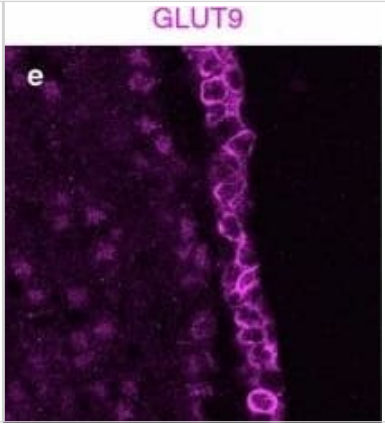
Immunocytochemistry/Immunofluorescence: GLUT9 Antibody [NBP1-05054] - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton-X100. The cells were incubated with anti-GLUT9 at a 1:200 dilution overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:500 dilution. Alpha tubulin (DM1A) NB100-690 was used as a co-stain at a 1:1000 dilution and detected with an anti-mouse Dylight 550 (Red) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



Immunohistochemistry-Paraffin: GLUT9 Antibody [NBP1-05054] - IHC-P analysis of mouse kidney section using GLUT9 antibody at 1:200 dilution. This antibody generated an expected cytoplasmic staining in tubular cells with a more staining towards membranes in some cells but no immunopositivity in Bowmans capsules.



Up□regulation of FOXC1 and TLR3/4 protein levels under myocardial ischaemia. Representative Western blot images and quantitative data for FOXC1, TLR3 and TLR4 proteins in ischaemia models of mice (A), H9c2 cells (B) and NRVMs (C) are shown herein. Validation data of the antibodies for TLR3 and TLR4 are shown in Figure S1. Data are means ± SEM. n = ~4□5/group. P values from the one□way ANOVAs: 0.018 (TLR3 protein in mice), .002 (TLR4 protein in mice) and 0.006 (FOXC1 protein in mice). aP < .05, AP < .01 vs control Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/31517441), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Zhang C, Zhang J, Zhu Q et al. Antihyperuricemia and antigouty arthritis effects of Persicaria capitata herba in mice Phytomedicine 2021-09-01 [PMID: 34610527] (WB, Mouse)

Oppelt S A, Zhang W et al. Specific regions of the brain are capable of fructose metabolism. Brain Res 2017-02-15 [PMID: 28034722] (WB, Mouse)

Yong T, Chen S, Xie Y et al. Hypouricemic Effects of Armillaria mellea on Hyperuricemic Mice Regulated through OAT1 and CNT2. Am. J. Chin. Med. 2018-03-29 [PMID: 29595077] (Mouse)

Yong T, Chen S, Xie Y, Chen D. Cordycepin, a Characteristic Bioactive Constituent inCordyceps militaris, Ameliorates Hyperuricemia through URAT1 in Hyperuricemic Mice. Front Microbiol. 2018-01-25 [PMID: 29422889] (WB, Mouse)

Yong T, Chen S, Xie Y et al. Hypouricemic Effects of Ganoderma applanatum in Hyperuricemia Mice through OAT1 and GLUT9 Front Pharmacol 2017-01-15 [PMID: 29379442] (WB, Mouse)

Tomioka NH, Tamura Y, Takada T et al. Immunohistochemical and in situ hybridization study of urate transporters GLUT9/URATv1, ABCG2, and URAT1 in the murine brain. Fluids Barriers CNS. 2016-12-12 [PMID: 27955673] (ICC/IF, Mouse)

Procedures

Serum protocol for GLUT9 Antibody (NBP1-05054)
GLUT9 Antibody:
Western Blot Protocol

1. Perform SDS-PAGE (4-12% MOPS) on samples to be analyzed, loading 30 ug of total protein per lane.
2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
3. Rinse membrane with dH2O and then stain the blot using Ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
4. Rinse the blot in TBS for approximately 5 minutes.
5. Block the membrane using 5% BSA in TBS + Tween, 1 hour at RT.
6. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
7. Dilute the rabbit anti-GLUT9 primary antibody (NBP1-05054) in blocking buffer and incubate 1 hour at room temperature.
8. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 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 instructions (Pierce ECL).

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.

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 NBP1-05054

NB820-60597	Human Kidney Membrane Tissue Lysate (Adult Membrane Normal)
NBP1-05054PEP	GLUT9 Antibody Blocking Peptide
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

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP1-05054

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications