

Product Datasheet

ALDH1L1 Antibody (2E7) - BSA Free NBP2-50033

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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NBP2-50033

ALDH1L1 Antibody (2E7) - BSA Free

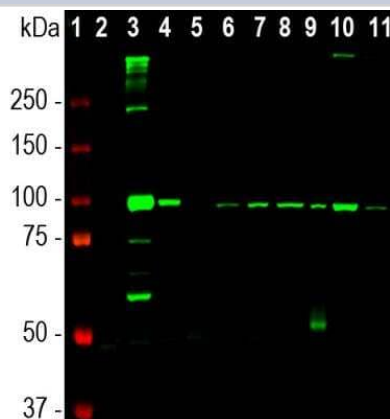
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	2E7
Preservative	0.035% Sodium Azide
Isotype	IgG1
Purity	Immunogen affinity purified
Buffer	50% PBS, 50% glycerol
Target Molecular Weight	100 kDa

Product Description	
Description	Novus Biologicals Mouse ALDH1L1 Antibody (2E7) - BSA Free (NBP2-50033) is a monoclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	10840
Gene Symbol	ALDH1L1
Species	Human, Mouse, Rat
Immunogen	Amino acids 402-902 of human ALDH1L1. [UniProt# O75891]

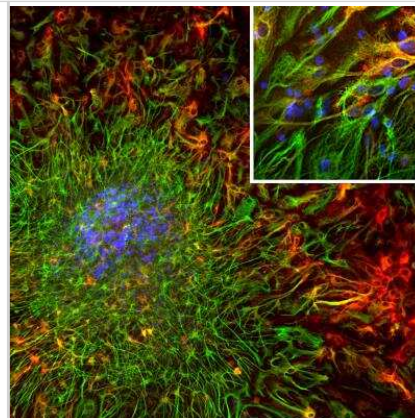
Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:5000 - 1:10000, Simple Western 1:20 - 1:250, Immunohistochemistry 1:1000, Immunocytochemistry/ Immunofluorescence 1:1000
Application Notes	See Simple Western Antibody Database for Simple Western validation: Tested in Mouse brain lysate, separated by Size, antibody dilution of 1;20, 1:100, 1:250, apparent MW was 91 kDa

Images

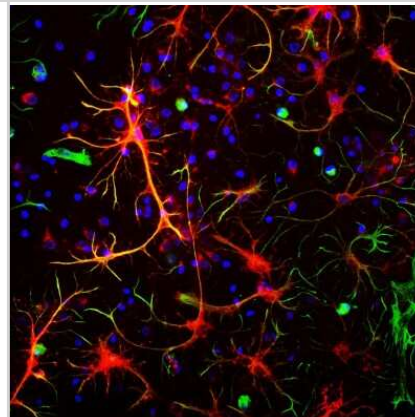
Western Blot: ALDH1L1 Antibody (2E7) [NBP2-50033] - Analysis of different tissue and cell lysates using mouse mAb to ALDH1L1, NBP2-50033, dilution 1:5,000 in green: [1] protein standard (red), rat tissue lysates: [2] heart, [3] liver, [4] kidney, [5] lung, [6] brain, and [7] spinal cord; mouse tissue lysates: [8] brain, and [9] spinal cord; cell lysates: [10] NIH-3T3, and [11] HEK293. The band at 100kDa mark corresponds to ALDH1L1 protein.



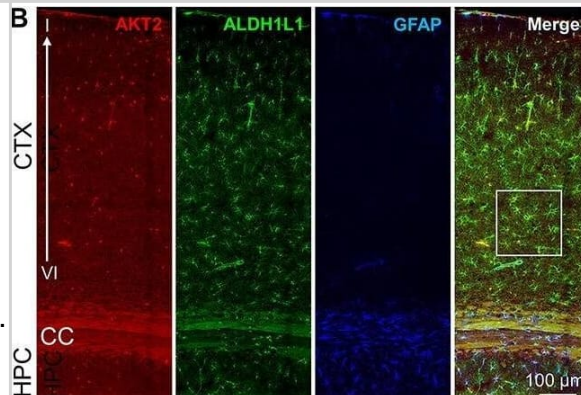
Immunocytochemistry/Immunofluorescence: ALDH1L1 Antibody (2E7) [NBP2-50033] - Analysis of cortical neuron-glia cell culture from E20 rat stained with mouse mAb to aldehyde dehydrogenase 1L1 (ALDH1L1), NBP2-50033, dilution 1:1,000 in red, and costained with chicken pAb to GFAP, dilution 1:5,000 in green. The blue is Hoechst staining of nuclear DNA. NBP2-50033 antibody produces cytoplasmic staining of glial cells, while the GFAP antibody labels the intermediate filament cytoskeleton in astrocytes and other glial cells. Some astrocytic cells express both ALDH1L1 and GFAP and appear yellow.



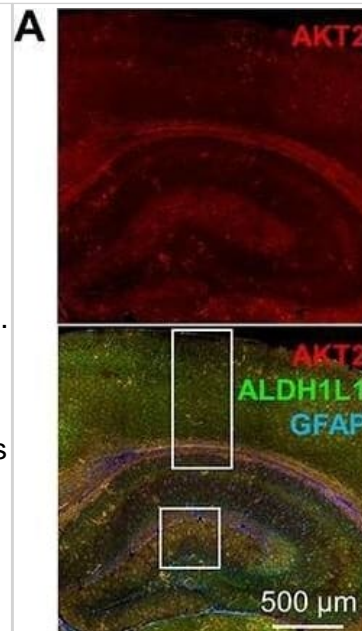
Immunocytochemistry/Immunofluorescence: ALDH1L1 Antibody (2E7) [NBP2-50033] - Neuron-glia cell mixed cultures stained with NBP2-50033 (red) and chicken polyclonal antibody against Vimentin (NB300-223, green). Blue is a DNA stain. NBP2-50033 stains astrocytic cell bodies and processes. The fibroblastic cells contain only Vimentin and so are green, while astrocytes contain either Vimentin and ALDH1L1, so appearing golden, or predominantly ALDH1L1, in which case they appear red.



AKT2 is expressed in astroglia. (A) Representative image of AKT2 (red) costaining with astrocyte markers ALDH1L1 (green) and glial fibrillary acidic protein (GFAP, blue) in the HPC and CTX of coronal mouse brain sections. AKT2 is present throughout these brain regions, with strong immunoreactivity in the molecular layer of the DG. (B) Higher magnification of the rectangular area in (A) shows ALDH1L1 expression throughout cortical layers I-VI like AKT2, whereas GFAP is largely absent from the CTX and displays greater immunoreactivity in the HPC. (C) Higher magnification of the white square in (B) confirms that AKT2 colocalizes with ALDH1L1, while little to no GFAP is detected in the CTX. (D) In the DG corresponding to the white square area in (A), AKT2 colocalizes with both ALDH1L1 and GFAP and is absent from the neuronal cell bodies in the granule cell layer. Lower panels: Higher magnification of the white square with profile views of the Z-stack images through an AKT2+ cell (arrow) confirms that AKT2 is present in the cell bodies of ALDH1L1+ and GFAP+ astrocytes. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/34296180>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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Publications

Milstead R, Link C, Xu Z, Hoeffler C Molecular Signaling and Neural Cell Type Expression of Complex Brain Disorders Thesis 1905-07-13 (IHC-FrFI, Mouse)

Milstead R, Link C, Xu Z, Hoeffler C Molecular Signaling and Neural Cell Type Expression of Complex Brain Disorders Thesis Jul 13 1905 12:00AM (IHC-FrFI, Mouse)

Schmitt EC The Role of AKT2 in Astrogliosis & Behavior and Nicotinic Regulation of CYP2A5 Thesis 2021-01-01



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 NBP2-50033

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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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