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Datasheet for ABIN670671

anti-DVL1 antibody (AA 21-100)

1 Validation

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1 Publication

Overview

Quantity:	100 µL
Target:	DVL1
Binding Specificity:	AA 21-100
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DVL1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human DVL1
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein A.

Target Details

Target:	DVL1
Alternative Name:	DVL1 (DVL1 Products)

Target Details

Background:	Synonyms: DVL, DVL1L1, DVL1P1, Segment polarity protein dishevelled homolog DVL-1, Dishevelled-1, DSH homolog 1, DVL1 Background: Participates in Wnt signaling by binding to the cytoplasmic C-terminus of frizzled family members and transducing the Wnt signal to down-stream effectors. Plays a role both in canonical and non-canonical Wnt signaling. Plays a role in the signal transduction pathways mediated by multiple Wnt genes. Required for LEF1 activation upon WNT1 and WNT3A signaling. DVL1 and PAK1 form a ternary complex with MUSK which is important for MUSK-dependent regulation of AChR clustering during the formation of the neuromuscular junction (NMJ).
Gene ID:	1855
UniProt:	O14640
Pathways:	WNT Signaling , Synaptic Membrane , Skeletal Muscle Fiber Development

Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 FCM 1:20-100 IHC-P 1:200-400 IHC-F 1:100-500 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C

Handling

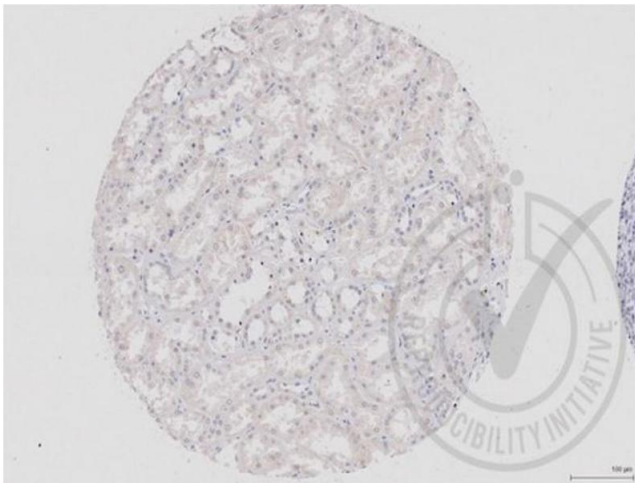
Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

Publications

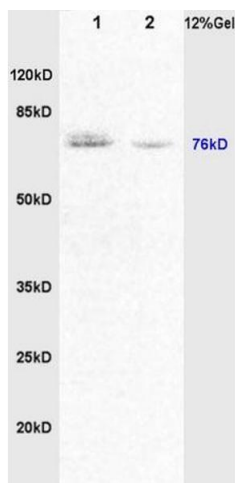
Product cited in: Hua, Xu, He, Jiang, Ye, Pan: "Wnt4/?-catenin signaling pathway modulates balloon-injured carotid artery restenosis via disheveled-1." in: **International journal of clinical and experimental pathology**, Vol. 7, Issue 12, pp. 8421-31, (2015) ([PubMed](#)).

Validation report #029657 for Immunohistochemistry (IHC)



Immunohistochemistry

Image 1. Images provided the Independent Validation Program (badge number 029657) Formalin-fixed and paraffin embedded human kidney labeled with Rabbit Anti-DVL1 Polyclonal Antibody (ABIN670671) at 1:250 overnight at room temperature followed by conjugation to secondary antibody.



SDS-PAGE

Image 2. Lane 1: rat brain lysates Lane 2: rat lung lysates probed with Anti DVL1/Dishevelled Polyclonal Antibody, Unconjugated (ABIN670671) at 1:200 in 4 °C. Followed by conjugation to secondary antibody at 1:3000 90min in 37 °C. Predicted band 76kD. Observed band size: 76kD.



Successfully validated (Immunohistochemistry (IHC))

by [Immunohistochemistry Core, NYU Langone](#)

Report Number: 029657

Date: Apr 03 2014

Lot Number: 140106

Method validated: Immunohistochemistry (IHC)

Positive Control: [Human kidney tubules](#)

Negative Control: [Human colon stromal tissue](#)

Notes: While faint, signal is detectable in positive control tissue and not in negative control tissue. Note that staining is expected in colon epithelial cells, and is not expected in kidney glomeruli.

Primary Antibody: - Antigen: Dishevelled, Dsh Homolog 1 (Drosophila) (DVL1) - Catalog number: ABIN670671 - Supplier: Bioss - Supplier catalog number: bs-0598r - Lot number: 140106

Secondary Antibody: - Antibody: Biotinylated goat anti-rabbit/anti-mouse (Kit) - Supplier: Ventana Medical Systems - Catalog number: 760-091 - Lot number: D07640BA

Isotype: - Antibody: Rabbit IgG isotype control - Supplier: Ventana Medical Systems - Catalog number: 790-2014 - Lot number: C11245

Controls:

- Positive control: Human kidney tissue stained with antibody
- Negative control: Human colon tissue stained with antibody
- Isotype control: Human kidney tissue stained with isotype control
- Secondary only control: Human kidney tissue stained with secondary antibody only

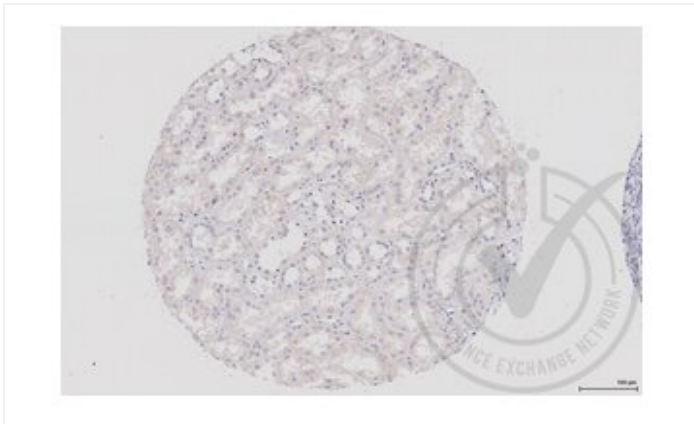
Protocol:

- Immunohistochemistry was performed on a Ventana NEXes automated platform; instrument manufacturer specific reagents are italicized.
- 1. Slides were preheated in convection oven at 60°C for 30 min
- 2. Deparaffinization procedure: - 3 changes of Xylene, 5 min each - 3 changes of 100% Ethanol, 3 min each - 3 changes of 95% Ethanol, 3 min each - Rinsed in distilled water, 3 changes
- 3. Heat retrieval procedure - Slides retrieved in 10.0 mM Citrate, pH6.0 in a 1000W microwave oven (~100°C) for 15 min. - Slides were allowed to cool (in citrate) for 30 min. - Slides were washed x 3 in Distilled water
- 4. NEXes instrument procedure, iView DAB paraffin protocol (*abridged*): - Slide chamber warmed to 37°C
- 5. Slides rinsed with *reaction buffer* x3

- 6. *iView Inhibitor (H2O2)* applied and incubated for 4 min
- 7. Slides rinsed with *reaction buffer*
- 8. Antibody Application - Primary antibody diluted 1:250 in PBS (100 microliter applied/slide) - Ventana Isotype control applied neat - Slides Incubated overnight at room temperature (~12 hours ~25°C)
- 9. Slides rinsed with *reaction buffer* x3
- 10. *iView Biotinylated IgG* applied and incubated for 8 min
- 11. Slides rinsed with *reaction buffer*
- 14. *iView Streptavidin-Horseradish Peroxidase* applied and incubated for 8 min
- 15. Slides rinsed with *reaction buffer*
- 16. *iView DAB/H2O2* applied and incubated for 8 min
- 17. Slides rinsed with *reaction buffer*
- 18. *iView Copper* applied and incubated for 4 min
- 19. Slides rinsed with *reaction buffer*
- 20. Slides washed in Dawn Detergent/tap water
- 21. Counterstain Procedure - Hematoxylin (Leica 560 MX) 30 sec - Slides washed in tap water, 1 min - Decolorized (10% Acetic Acid in 70% ethanol), 1 min - Slides washed in tap water, 1 min - Bluing (Austin Clear Ammonia), 1 min - Slides washed in tap water, 1 min
- 22. Dehydration/cover slipping procedure: - 3 changes of 95% Ethanol, 3 min each - 3 changes of 100% Ethanol, 3 min each - 3 changes of Xylene, 5 min each - Mounted with Permount
- 23. Imaging: Leica SCN 400F Whole Slide Scanner with Digital Image Hub and Leica Slidepath software

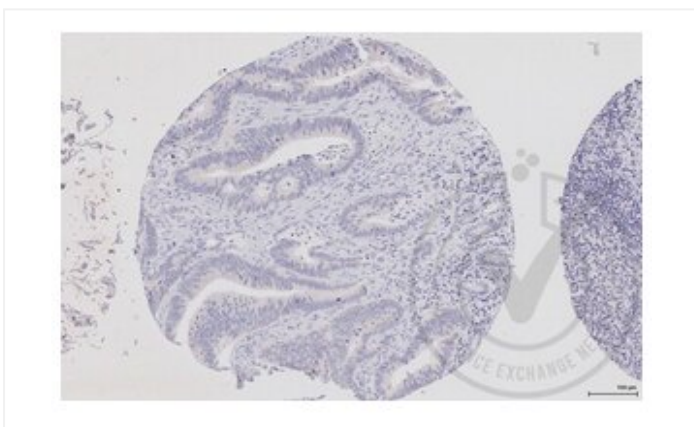
Experimental Notes:

- Step 1: Heated tissue 60°C for 30 minutes; manufacturer heats for 45 minutes.
- Step 2: No ethanol wash was performed during deparaffinization; manufacturer includes 1 wash of 80% ethanol for 3 minutes.
- Step 3.1: Slides were heated for 15 minutes; manufacturer provides a range of 15-20 minutes.
- Step 3.2: Slides were cooled for 30 minutes; manufacturer cools for 20 minutes.
- Step 4: Italicized reagents and incubation time are fixed instrument parameters.
- Step 5: Secondary species-specific serum block not used; manufacturer blocks with 5% normal goat serum for 2 hours.
- Step 8.1: Antibody diluted in PBS at 1:250; manufacture did not recommend diluent or dilution.
- Step 8.2.1: Primary antibody incubated at room temperature overnight; manufacturer incubates overnight 4°C with agitation.



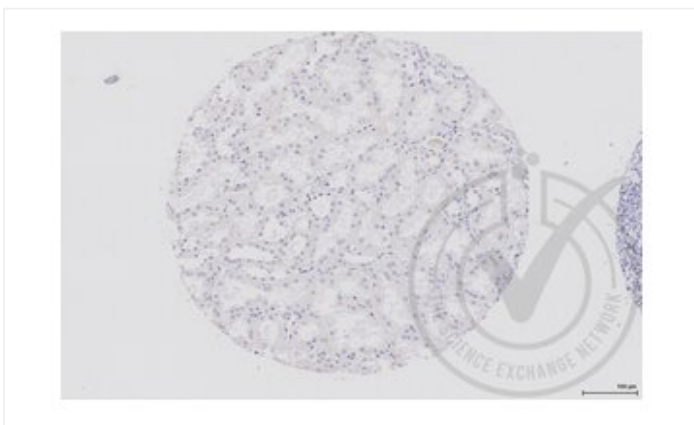
Validation image no. 1 for anti-Dishevelled Segment Polarity Protein 1 (DVL1) (AA 21-100) antibody (ABIN670671)

Figure 1: Human kidney tissue stained with anti-DVL1 (brown) and counterstained with hematoxylin.



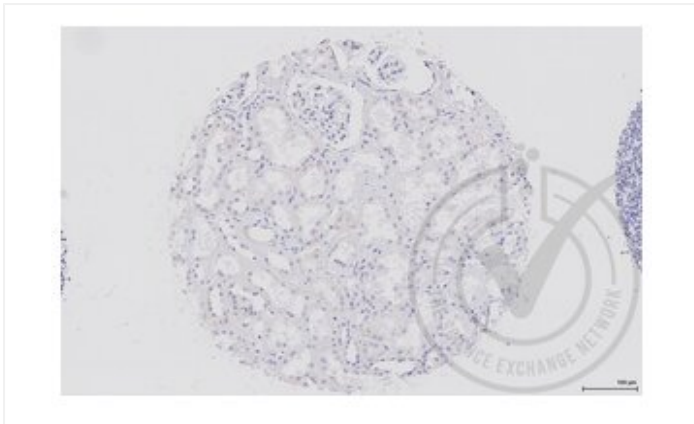
Validation image no. 2 for anti-Dishevelled Segment Polarity Protein 1 (DVL1) (AA 21-100) antibody (ABIN670671)

Figure 2: Human colon tissue stained with anti-DVL1 (brown) and counterstained with hematoxylin.



Validation image no. 3 for anti-Dishevelled Segment Polarity Protein 1 (DVL1) (AA 21-100) antibody (ABIN670671)

Figure 3: Human kidney tissue stained with isotype control antibody (brown) and counterstained with hematoxylin.



Validation image no. 4 for anti-Dishevelled Segment Polarity Protein 1 (DVL1) (AA 21-100) antibody (ABIN670671)

Figure 4: Human kidney tissue stained with secondary only (brown) and counterstained with hematoxylin.