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DVL1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5629

Specification

DVL1 Antibody (Center) - Product Information

Application	**WB, IF,E**
Primary Accession	O14640
Other Accession	P51141, Q5IS48, Q9WVB9, P54792
Reactivity	**Human, Mouse**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**H=75,73;M=75;R=75 KDa**
Isotype	**Rabbit IgG**
Antigen Source	**HUMAN**

DVL1 Antibody (Center) - Additional Information

Gene ID 1855

Antigen Region
442-470

Other Names
Segment polarity protein dishevelled homolog DVL-1, Dishevelled-1, DSH homolog 1, DVL1

Dilution
WB~~1:2000
IF~~1:25

Target/Specificity
This DVL1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 442-470 amino acids from the Central region of human DVL1.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
DVL1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

DVL1 Antibody (Center) - Protein Information

Name DVL1

Function

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).

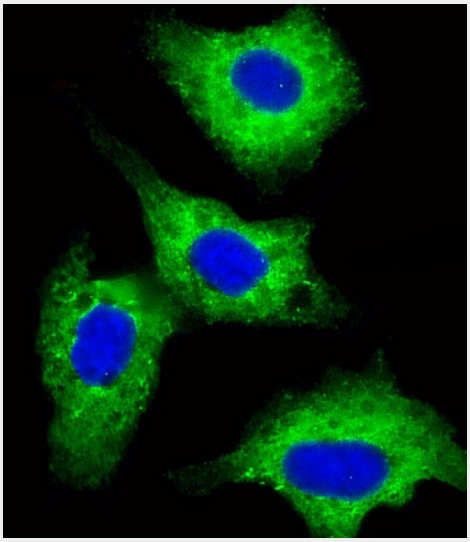
Cellular Location
Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytosol. Cytoplasmic vesicle Note=Localizes at the cell membrane upon interaction with frizzled family members.

DVL1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DVL1 Antibody (Center) - Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized HepG2 (human liver hepatocellular carcinoma cell line) cells labeling Pdx1 with AP12326C at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on HepG2 cell line. The nuclear counter stain is DAPI (blue).

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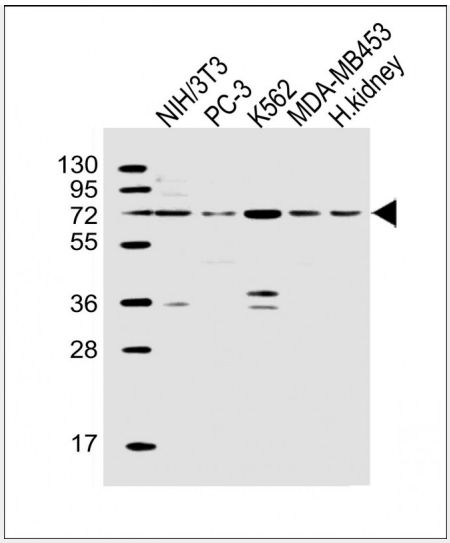

All lanes : Anti-DVL1 Antibody (Center) at 1:2000 dilution Lane 1: NIH/3T3 whole cell lysate Lane 2: PC-3 whole cell lysate Lane 3: K562 whole cell lysate Lane 4: MDA-MB453 whole cell lysate Lane 5: human kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 75 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

DVL1 Antibody (Center) - Background

DVL1, the human homolog of the Drosophila dishevelled gene (dsh) encodes a cytoplasmic phosphoprotein that regulates cell proliferation, acting as a transducer molecule for developmental processes, including segmentation and neuroblast specification. DVL1 is a candidate gene for neuroblastomatous transformation. The Schwartz-Jampel syndrome and Charcot-Marie-Tooth disease type 2A have been mapped to the same region as DVL1. The phenotypes of these diseases may be consistent with defects which might be expected from aberrant expression of a DVL gene during development.

DVL1 Antibody (Center) - References

Metcalfe, C., et al. J. Cell. Sci. 123 (PT 9), 1588-1599 (2010) :
Hu, T., et al. J. Biol. Chem. 285(18):13561-13568(2010)
Varelas, X., et al. Dev. Cell 18(4):579-591(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :
Guo, J., et al. PLoS ONE 4 (11), E7982 (2009) :