

Anti-Dishevelled 2 Picoband Antibody

Catalog # ABO10247

Product Information

Application	WB
Primary Accession	O14641
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Segment polarity protein dishevelled homolog DVL-2(DVL2) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	1856
Other Names	Segment polarity protein dishevelled homolog DVL-2, Dishevelled-2, DSH homolog 2, DVL2
Calculated MW	78948
Application Details	Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human
Subcellular Localization	Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Cytoplasm, cytosol . Cytoplasmic vesicle . Localizes at the cell membrane upon interaction with frizzled family members and promotes their internalization. Localizes to cytoplasmic puncta (By similarity). .
Source	Eukaryota
Protein Name	Segment polarity protein dishevelled homolog DVL-2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Dishevelled 2 (35-64aa AERITLGDFKSVLQRPAGAKYFFKSMDQDF), identical to the related mouse sequence.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated

freezing and thawing.

Protein Information

Name	DVL2
Function	Plays a role in the signal transduction pathways mediated by multiple Wnt genes (PubMed: 24616100). Participates both in canonical and non-canonical Wnt signaling by binding to the cytoplasmic C- terminus of frizzled family members and transducing the Wnt signal to down-stream effectors. Promotes internalization and degradation of frizzled proteins upon Wnt signaling.
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:Q60838}; Peripheral membrane protein {ECO:0000250 UniProtKB:Q60838}; Cytoplasmic side {ECO:0000250 UniProtKB:Q60838}. Cytoplasm, cytosol. Cytoplasmic vesicle {ECO:0000250 UniProtKB:Q60838}. Nucleus Note=Localizes at the cell membrane upon interaction with frizzled family members and promotes their internalization. Localizes to cytoplasmic puncta (By similarity). Interaction with FOXP1 and FOXP2 induces nuclear translocation (PubMed:25805136) {ECO:0000250 UniProtKB:Q60838, ECO:0000269 PubMed:24616100, ECO:0000269 PubMed:25805136}

Background

Segment polarity protein dishevelled homolog DVL-2 is a protein that in humans is encoded by the DVL2 gene. This gene encodes a member of the dishevelled (dsh) protein family. The vertebrate dsh proteins have approximately 40% amino acid sequence similarity with Drosophila dsh. This gene encodes a 90-kD protein that undergoes posttranslational phosphorylation to form a 95-kD cytoplasmic protein, which may play a role in the signal transduction pathway mediated by multiple Wnt proteins. The mechanisms of dishevelled function in Wnt signaling are likely to be conserved among metazoans.

Images

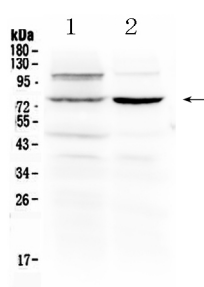


Figure 1. Western blot analysis of Dishevelled 2 using anti- Dishevelled 2 antibody (ABO10247). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: mouse kidney tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- Dishevelled 2 antigen affinity purified polyclonal antibody (Catalog # ABO10247) at 0.5 μ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Dishevelled 2 at approximately 79KD. The expected band size for Dishevelled 2 is at 79KD.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.