

Advillin Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54508

Specification

Advillin Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>075366</u>

Reactivity
Host
Rabbit
Report
Reactivity
Rat, Pig, Dog, Bovine
Rabbit
Report
Reactivity

Clonality Polyclonal Calculated MW 90 KDa Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human Advillin

Epitope Specificity 151-250/819

Isotype
Purity
affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm > cytoskeleton. Cell projection.

Cell projection > axon.

SIMILARITY Belongs to the villin/gelsolin family.

Contains 6 gelsolin-like repeats, Contains 1

HP (headpiece) domain.

SUBUNIT Associates (via C-terminus) with actin.

Interacts with SCARF1 (By similarity).

Interacts with F-actin.

Important Note This product as supplied is intended for

research use only, not for use in human,

therapeutic or diagnostic applications.

Background Descriptions

Advillin is an 819 amino acid protein that localizes to both the cytoplasm and the cytoskeleton and contains one HP domain and six gelsolin-like repeats. Expressed at high levels in colon and small intestine and at lower levels in uterus, thymus, testis and prostate, advillin functions as a calcium-regulated Actin-binding protein that may be involved in the development of neuronal cells, specifically those that form ganglia. The gene encoding advillin maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and Trisomy 12p, which causes facial developmental defects and seizure disorders.

Advillin Polyclonal Antibody - Additional Information

Gene ID 10677

Other Names



Advillin, p92, AVIL (HGNC:14188)

Target/Specificity

Most highly expressed in the small intestine and colonic lining. Weaker expression also detected in the thymus, prostate, testes and uterus.

Dilution

WB~~1:1000<br \><span class
="dilution_IHC-P">IHC-P~~N/A<br \><span class
="dilution_IHC-F">IHC-F~~N/A<br \><span class
="dilution_IF">IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Advillin Polyclonal Antibody - Protein Information

Name AVIL (HGNC:14188)

Function

Ca(2+)-regulated actin-binding protein which plays an important role in actin bundling (PubMed:29058690). May have a unique function in the morphogenesis of neuronal cells which form ganglia. Required for SREC1-mediated regulation of neurite-like outgrowth. Plays a role in regenerative sensory axon outgrowth and remodeling processes after peripheral injury in neonates. Involved in the formation of long fine actin-containing filopodia-like structures in fibroblast. Plays a role in ciliogenesis. In podocytes, controls lamellipodia formation through the regulation of EGF-induced diacylglycerol generation by PLCE1 and ARP2/3 complex assembly (PubMed:29058690).

Cellular Location

Cytoplasm, cytoskeleton. Cell projection, lamellipodium. Cell junction, focal adhesion. Cell projection, neuron projection {ECO:0000250|UniProtKB:Q9WU06}. Cell projection, axon {ECO:0000250|UniProtKB:Q9WU06}. Note=In podocytes, present in the F- actin-enriched cell periphery that generates lamellipodia and focal adhesions.

Tissue Location

Most highly expressed in the small intestine and colonic lining. Weaker expression also detected in the thymus, prostate, testes and uterus (PubMed:12034507). Expressed in podocytes (at protein level) (PubMed:29058690).

Advillin Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

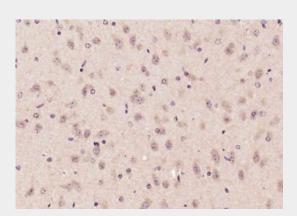




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- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Advillin Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Advillin) Polyclonal Antibody, Unconjugated (bs-11451R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.