10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# AVIL Antibody (N-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**

**Catalog # AP4756a**

## Specification

### AVIL Antibody (N-term) - Product Information

| | |
|---|---|
| Application | **FC, IHC-P, WB,E** |
| Primary Accession | O75366 |
| Other Accession | O88398, Q9WU06 |
| Reactivity | **Human** |
| Predicted | **Mouse, Rat** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **92027** |
| Antigen Region | **176-204** |

### AVIL Antibody (N-term) - Additional Information

**Gene ID** 10677

**Other Names**
Advillin, p92, AVIL

**Target/Specificity**
This AVIL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 176-204 amino acids from the N-terminal region of human AVIL.

**Dilution**
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**
AVIL Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### AVIL Antibody (N-term) - 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.

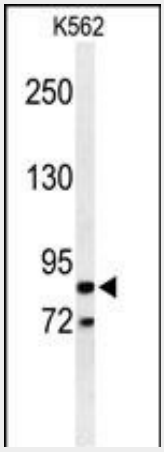
**Tissue Location**
Most highly expressed in the small intestine and colonic lining. Weaker expression also detected in the thymus, prostate, testes and uterus (PubMed:12034507). Expressed in podocytes (at protein level) (PubMed:29058690).

## AVIL Antibody (N-term) - Protocols

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

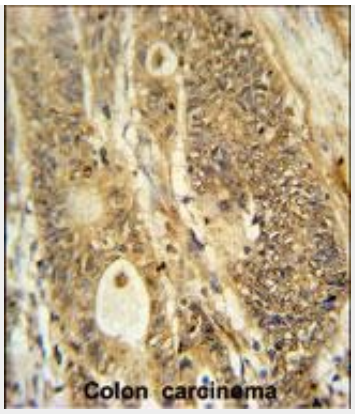
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## AVIL Antibody (N-term) - Images

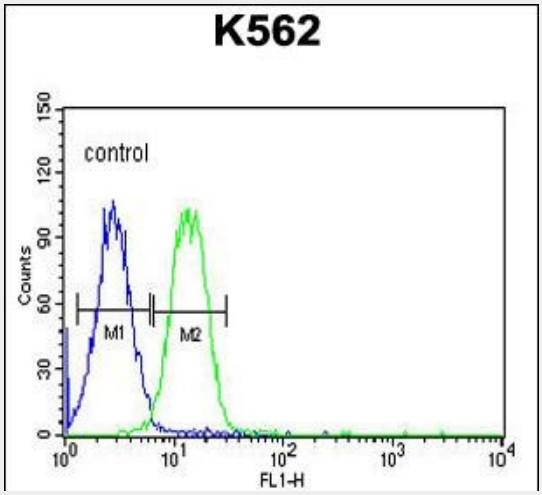



Western blot analysis of AVIL Antibody (N-term) (Cat. #AP4756a) in K562 cell line lysates (35ug/lane). AVIL (arrow) was detected using the purified Pab.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999




AVIL Antibody (N-term) (Cat. #AP4756a) immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the AVIL Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.




AVIL Antibody (N-term) (Cat. #AP4756a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

**AVIL Antibody (N-term) - Background**

AVIL is a member of the gelsolin/villin family of actin regulatory proteins. This protein has structural similarity to villin. It binds actin and may play a role in the development of neuronal cells that form ganglia.

**AVIL Antibody (N-term) - References**

Piana, S., et al. J. Mol. Biol. 375(2):460-470(2008)
Vermeulen, W., et al. Protein Sci. 13(5):1276-1287(2004)
Tumer, Z., et al. Gene 288 (1-2), 179-185 (2002)