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

Anti-VASH1 Antibody

Catalog # AP61401

Product Information

Application	WB, IF/IC
Primary Accession	Q7L8A9
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40957

Additional Information

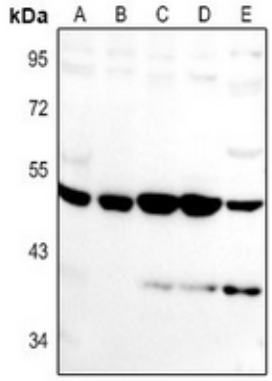
Gene ID	22846
Other Names	KIAA1036; VASH; Vasohibin-1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human VASH1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

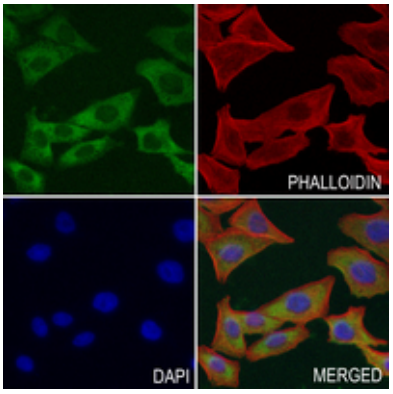
Name	VASH1 (HGNC:19964)
Function	Tyrosine carboxypeptidase that removes the C-terminal tyrosine residue of alpha-tubulin, thereby regulating microtubule dynamics and function (PubMed:29146869, PubMed:31171830, PubMed:31235910, PubMed:31235911, PubMed:31270470). Critical for spindle function and accurate chromosome segregation during mitosis since microtubule detyrosination regulates mitotic spindle length and postioning (PubMed:31171830). Acts as an angiogenesis inhibitor: inhibits migration, proliferation and network formation by endothelial cells as well as angiogenesis (PubMed:15467828, PubMed:16488400, PubMed:16707096, PubMed:19204325). This inhibitory effect is selective to endothelial cells as it does not affect the migration of smooth muscle cells or fibroblasts (PubMed:15467828, PubMed:16488400, PubMed:16707096).
Cellular Location	Cytoplasm. Secreted. Note=Mainly localizes in the cytoplasm (PubMed:27879017). Some fraction is secreted via a non-canonical secretion system; interaction with SVBP promotes secretion (PubMed:27879017).

Tissue Location	Preferentially expressed in endothelial cells (PubMed:15467828, PubMed:16707096). Highly expressed in fetal organs (PubMed:15467828). Expressed in brain and placenta, and at lower level in heart and kidney (PubMed:15467828). Highly detected in microvessels endothelial cells of atherosclerotic lesions (PubMed:16707096)

Images



Western blot analysis of VASH1 expression in BV2 (A), C6 (B), SGC7901 (C), LO2 (D), U87MG (E) whole cell lysates. (Predicted band size: 40 kD; Observed band size: 48 kD)



Immunofluorescent analysis of VASH1 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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