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VASH1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50792

Product Information

Application	WB
Primary Accession	Q7L8A9
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Calculated MW	40957

Additional Information

Gene ID	22846
Other Names	Vasohibin-1, VASH1, KIAA1036, VASH
Dilution	WB~~ 1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20℃

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 detyronisation 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)

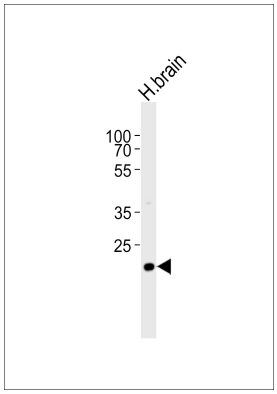
Background

Angiogenesis inhibitor. Inhibits migration, proliferation and network formation by endothelial cells as well as angiogenesis. This inhibitory effect is selective to endothelial cells as it does not affect the migration of smooth muscle cells or fibroblasts. Does not affect the proliferation of cancer cells in vitro, but inhibits tumor growth and tumor angiogenesis. Acts in an autocrine manner. Inhibits artery neointimal formation and macrophage infiltration. Exhibits heparin-binding activity.

References

Kikuno R.,et al.DNA Res. 6:197-205(1999).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Heilig R.,et al.Nature 421:601-607(2003).
Watanabe K.,et al.J. Clin. Invest. 114:898-907(2004).
Shimizu K.,et al.Biochem. Biophys. Res. Commun. 327:700-706(2005).

Images



Western blot analysis of lysate from human brain tissue lysate,using VASH1 Antibody(AP50792). AP50792 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.