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Product datasheet for AP26021PU-N

KRIT1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	**Western Blot:** 1-5 µg/ml. **Immunofluorescence:** 1-10 µg/ml. **Immunohistochemistry:** 1/200.
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Highly pure (>95%) recombinant Human CCM-1 (Met1-Ser736) derived from *E. coli* fused to a C-teminal His-tag (6 x His) (*Cat.-No* AR26002PU-N).
Specificity:	This antibody is anti-His depleated. It detects KRIT1 / CCM1.
Formulation:	5mM PBS, pH 7.2 State: Purified State: Lyophilized purified IgG fraction
Reconstitution Method:	Restore in sterile water to a concentration of 0.1-1.0 mg/ml. Centrifuge vial prior to opening.
Purification:	Protein A Chromatography
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at 2-8°C. Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	KRIT1, ankyrin repeat containing
Database Link:	Entrez Gene 889 Human O00522

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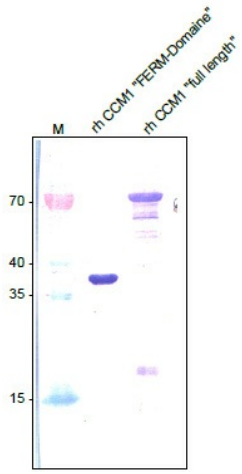
Background: **Cerebral Cavernous Malformations** (CCM) are frequent vascular abnormalities caused by mutations in one of the CCM genes. CCM-1 (also known as KRIT1) stabilizes endothelial junctions and is essential for vascular morphogenesis in mouse embryos. However, cellular functions of CCM-1 during the early steps of the CCM pathogenesis remain unknown. It was shown that CCM-1 represents an antiangiogenic protein to keep the human endothelium quiescent. CCM-1 inhibits endothelial proliferation, apoptosis, migration, lumen formation, and sprouting angiogenesis in primary human endothelial cells. CCM-1 strongly induces DLL4-NOTCH signaling, which promotes AKT phosphorylation but reduces phosphorylation of the mitogen-activated protein kinase ERK. Consistently, blocking of NOTCH activity alleviates CCM-1 effects. ERK phosphorylation is increased in human CCM lesions. Transplantation of CCM-1-silenced human endothelial cells into SCID mice recapitulates hallmarks of the CCM pathology and serves as a unique CCM model system.

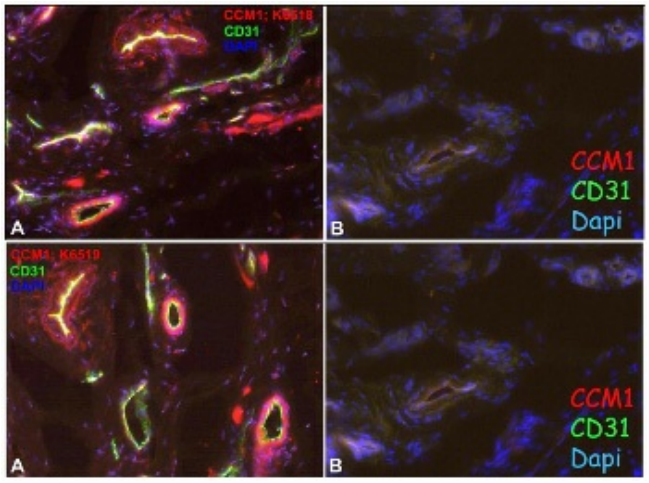
Synonyms: Krev interaction trapped 1

Protein Families: Druggable Genome

Product images:



Western analysis of recombinant Human CCM-1 (FERM domain) and recombinant Human full length CCM-1 using a Rabbit polyclonal anti-Human CCM-1 antibody generated against the recombinant FERM domain of Human CCM-1.



Immunofluorescence staining of Human foreskin (Cryo-section of unfixed tissue) with anti-CCM1 Antibody (red, dilution: 1/50). Costaining of endothelial cells with anti-CD31 (green). Note specific staining in the wall of a subset of vessel. Nuclei counter-stained with Dapi (blue). Specimen provided by Prof. Dr. J. Wilting and Dr. K. Buttler, Goettingen.