Datasheet for ABIN616006

anti-CCM2 antibody (N-Term)

2 Images

Go to Product page

Overview

Quantity:	0.1 mg
Target:	CCM2
Binding Specificity:	AA 1-444, N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CCM2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Highly pure (> 95%) recombinant Human CCM-2 (Cerebral cavernous malformations 2 protein, aa: Met1-Ala444) from E.coli.
Specificity:	This antibody detects recombinant Human CCM-2 in Western Blot and native CCM-2 in Immunohistochemistry.
Cross-Reactivity (Details):	Species reactivity (tested):Human.
Purification:	Protein A Chromatography

Target Details

Target:	CCM2
Alternative Name:	Malcavernin (CCM2 Products)

Target Details

Background:	Cerebral cavernous malformations (CCMs) are sporadically acquired or inherited vascular lesions of the central nervous system consisting of clusters of dilated thin-walled blood vessels that predispose individuals to seizures and stroke. Familial CCM is caused by mutations in KRIT1 (CCM1) or in malcavernin (CCM2). The roles of the CCM proteins in the pathogenesis of the disorder remain largely unknown. It was shown that the CCM1 gene product, KRIT1, interacts with the CCM2 gene product, malcavernin. Analogous to the established interactions of CCM1 and beta1 integrin with ICAP1, the CCM1/CCM2 association is dependent upon the phosphotyrosine binding (PTB) domain of CCM2. A familial CCM2 missense mutation abrogates the CCM1/CCM2 interaction, suggesting that loss of this interaction may be critical in CCM pathogenesis. CCM2 and ICAP1 bound to CCM1 via their respective PTB domains differentially influence the subcellular localization of CCM1. The data indicate that the genetic heterogeneity observed in familial CCM may reflect mutation of different molecular members of a coordinated signaling complex.Synonyms: C7orf22, CCM2, Cerebral cavernous malformations 2 protein, PP10187
Gene ID:	83605
NCBI Accession:	NP_001025006
UniProt:	Q9BSQ5
Pathways:	Cell-Cell Junction Organization

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

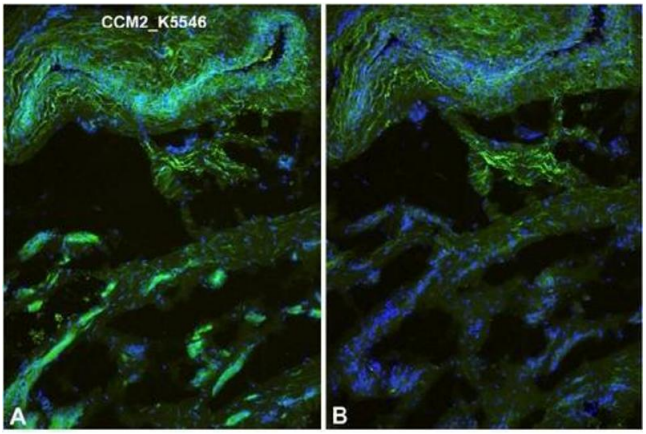
Handling

Reconstitution:	Restore in sterile water to a concentration of 0.1-1.0 mg/mL.
Buffer:	5 mM PBS pH 7.2 without preservatives
Preservative:	Without preservative
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	Prior to reconstitution store at 2-8 °C for one month or dessicated at -20 °C for longer. Following reconstitution store undiluted at 2-8 °C for one month or (in aliquots) at -20 °C for

Handling

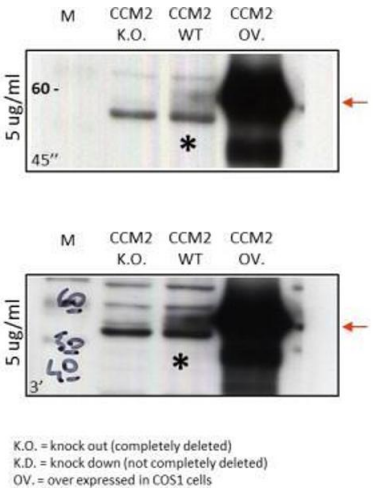
longer.

Images



Immunofluorescence

Image 1. Immunofluorescence staining (green) of Human foreskin (cryo-section of unfixed tissue) with anti-Human CCM2 antibody Cat.-No. AP26022PU(K5546, dilution1/50). A) Note specific staining in the wall of microvessels. B) Negative control of a consecutive section. Note non-specific fluorescence in elastic fibres in the adventitia of anarteriol. Nuclei counter-stained with Dapi (blue). *Specimen provided by Prof. Dr. J. Wilting, Goettingen. The experiment was performed by the research group of Prof. Dr. J. Wilting, University Göttingen, Germany.*



Western Blotting

Image 2. Western Blot Analysis of anti-human CCM-2.

The experiment was performed by Elisabetta Dejana's group, IFOM-IEO-Campus, Milan

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