ACTIVE BIOSCIENCE
PROTEINS · CELLS · ANTIBODIES

Human CCM-2, His-Tag

Synonyms: CCM-2, malcavernin, cerebral cavernous malformation 2, OSM, C7orf22, PP10187

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
20 µg	4120.950.020		
100 µg	4120.950.100		

Please enquire for bulk quantities and other vial sizes

Description

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. The CCM-2 is fused to a N-terminal His-tag (6x His).

- **Source** *E. Coli*
- **Purity** ≥ 95 % (SDS-PAGE, silver stained)

Biological Activity

Testing in Progress.

Reconstitution

The lyophilized CCM-2 is soluble in water and most aqueous buffers and should be reconstituted in water or PBS.

Amino Acid Sequence

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MGSSHHHHHH SSGLVPRGSH MEEEGKKGKK PGIVSPFKRV FLKGEKSRDK KAHEKVTERR PLHTVVLSLP
ERVEPDRLLS DYIEKEVKYL GQLTSIPGYL NPSSRTEILH FIDNAKRAHQ LPGHLTQEHD AVLSLSAYNV
KLAWRDGEDI ILRVPIHDIA AVSYVRDDAA HLVVLKTAQD PGISPSQSLC AESSRGLSAG SLSESAVGPV
EACCLVILAA ESKVAAEELC CLLGQVFQVV YTESTIDFLD RAIFDGASTP THHLSLHSDD SSTKVDIKET
YEVEASTFCF PESVDVGGAS PHSKTISESE LSASATELLQ DYMLTLRTKL SSQEIQQFAA LLHEYRNGAS
IHEFCINLRQ LYGDSRKFLL LGLRPFIPEK DSQHFENFLE TIGVKDGRGI ITDSFGRHRR ALSTTSSSTT
NGNRATGSSD DRSAPSEGDE WDRMISDISS DIEALGCSMD QDSA
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Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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