

FCSD2 Blocking Peptide (C-term) Synthetic peptide Catalog # BP20110b

Specification

FCSD2 Blocking Peptide (C-term) - Product Information

Primary Accession Other Accession <u>094868</u> <u>NP_055639.2</u>

FCSD2 Blocking Peptide (C-term) - Additional Information

Gene ID 9873

Other Names FCH and double SH3 domains protein 2, Carom, SH3 multiple domains protein 3, FCHSD2, KIAA0769, SH3MD3

Target/Specificity The synthetic peptide sequence is selected from aa 721-734 of HUMAN FCHSD2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FCSD2 Blocking Peptide (C-term) - Protein Information

Name FCHSD2

Synonyms KIAA0769, SH3MD3

Function

Adapter protein that plays a role in endocytosis via clathrin-coated pits. Contributes to the internalization of cell surface receptors, such as integrin ITGB1 and transferrin receptor (PubMed:29887380). Promotes endocytosis of EGFR in cancer cells, and thereby contributes to the down-regulation of EGFR signaling (PubMed:30249660). Recruited to clathrin-coated pits during a mid-to- late stage of assembly, where it is required for normal progress from U-shaped intermediate stage pits to terminal, omega-shaped pits (PubMed:29887380). Binds to membranes enriched in phosphatidylinositol 3,4-bisphosphate or phosphatidylinositol 3,4,5-trisphosphate (PubMed:29887380). When bound



to membranes, promotes actin polymerization via its interaction with WAS and/or WASL which leads to the activation of the Arp2/3 complex. Does not promote actin polymerisation in the absence of membranes (PubMed:>29887380).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q3USJ8}. Cell junction. Membrane, clathrin-coated pit. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, stereocilium {ECO:0000250|UniProtKB:Q3USJ8}. Note=Partially localized at clathrin-coated pits at the cell membrane (PubMed:30249660). Detected at the cell membrane at sites around clathrin-coated pits, very close to the clathrin-coated pits but not an intrinsic part of the clathrin-coated pits (PubMed:29887380) Colocalizes at cell-cell contacts with CDH1, but is not detected at tight junctions (PubMed:14627983).

Tissue Location

Liver, brain, heart, placenta, skeletal muscle, pancreas, lung and kidney.

FCSD2 Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Blocking Peptides</u>
- FCSD2 Blocking Peptide (C-term) Images

FCSD2 Blocking Peptide (C-term) - Background

The function of this protein is unknown.

FCSD2 Blocking Peptide (C-term) - References

Rose, J. Phd, et al. Mol. Med. (2010) In press : Thalappilly, S., et al. Proteomics 8(15):3071-3081(2008) Taylor, T.D., et al. Nature 440(7083):497-500(2006) Katoh, M., et al. Int. J. Mol. Med. 13(5):749-754(2004) Coyle, I.P., et al. Neuron 41(4):521-534(2004)