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SORCS2 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP5514b

Specification

SORCS2 Antibody (C-term) Blocking peptide - Product Information

Primary Accession	Q96PQ0
Other Accession	NP_065828.2

SORCS2 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 57537

Other Names
VPS10 domain-containing receptor SorCS2, SORCS2, KIAA1329

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.

SORCS2 Antibody (C-term) Blocking peptide - Protein Information

Name SORCS2

Synonyms KIAA1329

Function
The heterodimer formed by NGFR and SORCS2 functions as receptor for the precursor forms of NGF (proNGF) and BDNF (proBDNF) (PubMed:22155786, PubMed:24908487). ProNGF and proBDNF binding both promote axon growth cone collapse (in vitro) (PubMed:22155786, PubMed:24908487). Plays a role in the regulation of dendritic spine density in hippocampus neurons (By similarity). Required for normal neurite branching and extension in response to BDNF (PubMed:27457814). Plays a role in BDNF-dependent hippocampal synaptic plasticity. Together with NGFR and NTRK2, is required both for BDNF-mediated synaptic long-term depression and long-term potentiation (PubMed:27457814). ProNGF binding promotes dissociation of TRIO from the heterodimer, which leads to inactivation of RAC1 and/or RAC2 and subsequent reorganization of the actin cytoskeleton (PubMed:<a

href="http://www.uniprot.org/citations/22155786" target="_blank">22155786). Together with the retromer complex subunit VPS35, required for normal expression of GRIN2A at synapses and dendritic cell membranes. Required for normal expression of the amino acid transporter SLC1A1 at the cell membrane, and thereby contributes to protect cells against oxidative stress (By similarity).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell projection {ECO:0000250|UniProtKB:Q9EPR5}. Cytoplasmic vesicle membrane; Single-pass type I membrane protein. Early endosome membrane {ECO:0000250|UniProtKB:Q9EPR5}. Recycling endosome membrane {ECO:0000250|UniProtKB:Q9EPR5}. Synapse, synaptosome {ECO:0000250|UniProtKB:Q9EPR5}. Perikaryon. Cell projection, dendrite. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q9EPR5}. Postsynaptic density membrane {ECO:0000250|UniProtKB:Q9EPR5}

Tissue Location
Detected on neurons in the caudate region (PubMed:28469074). Detected on neurons in the hippocampus (at protein level) (PubMed:30840898). Highly expressed in brain and kidney Detected at low levels in heart, liver, small intestine, skeletal muscle and thymus (PubMed:11499680).

SORCS2 Antibody (C-term) Blocking peptide - Protocols

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

- Blocking Peptides

SORCS2 Antibody (C-term) Blocking peptide - Images