

DISC1 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP14796b

Specification

DISC1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q9NRI5</u>

DISC1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 27185

Other Names Disrupted in schizophrenia 1 protein, DISC1, KIAA0457

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.

DISC1 Antibody (C-term) Blocking Peptide - Protein Information

Name DISC1 (HGNC:2888)

Synonyms KIAA0457

Function

Involved in the regulation of multiple aspects of embryonic and adult neurogenesis (PubMed:19502360, PubMed:19303846). Required for neural progenitor proliferation in the ventrical/subventrical zone during embryonic brain development and in the adult dentate gyrus of the hippocampus (By similarity). Participates in the Wnt-mediated neural progenitor proliferation as a positive regulator by modulating GSK3B activity and CTNNB1 abundance (PubMed: 19303846). Plays a role as a modulator of the AKT-mTOR signaling pathway controlling the tempo of the process of newborn neurons integration during adult neurogenesis, including neuron positioning, dendritic development and synapse formation (By similarity). Inhibits the activation of AKT-mTOR signaling upon interaction with CCDC88A (By similarity). Regulates the migration of early-born granule cell precursors toward the dentate gyrus during the hippocampal development (PubMed: 19502360). Inhibits ATF4 transcription factor activity in neurons by disrupting ATF4 dimerization and DNA-binding (By similarity). Plays a role, together with PCNT, in the microtubule network formation (PubMed:<a href="http://www.uniprot.org/citations/18955030"



target="_blank">18955030).

Cellular Location

Cytoplasm. Cytoplasm, cytoskeleton Mitochondrion. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Postsynaptic density {ECO:0000250|UniProtKB:Q811T9}. Note=Colocalizes with NDEL1 in the perinuclear region and the centrosome (By similarity). Localizes to punctate cytoplasmic foci which overlap in part with mitochondria (PubMed:12506198, PubMed:15797709). Colocalizes with PCNT at the centrosome (PubMed:18955030). {ECO:0000250|UniProtKB:Q811T9, ECO:0000269|PubMed:12506198, ECO:0000269|PubMed:15797709, ECO:0000269|PubMed:18955030}

Tissue Location

Ubiquitous. Highly expressed in the dentate gyrus of the hippocampus. Also expressed in the temporal and parahippocampal cortices and cells of the white matter.

DISC1 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

DISC1 Antibody (C-term) Blocking Peptide - Images

DISC1 Antibody (C-term) Blocking Peptide - Background

This gene encodes a protein with multiple coiled coilmotifs which is located in the nucleus, cytoplasm and mitochondria. The protein is involved in neurite outgrowth and cortical development through its interaction with other proteins. This geneis disrupted in a t(1;11)(q42.1;q14.3) translocation which segregates with schizophrenia and related psychiatric disorders ina large Scottish family. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided byRefSeq].

DISC1 Antibody (C-term) Blocking Peptide - References

Park, Y.U., et al. Proc. Natl. Acad. Sci. U.S.A. 107(41):17785-17790(2010)Raznahan, A., et al. Mol. Psychiatry (2010) In press :Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)Kaibuchi, K., et al. Nihon Shinkei Seishin Yakurigaku Zasshi 30(3):149-152(2010)Shulman, J.M., et al. PLoS ONE 5 (6), E11244 (2010) :