

**DISC1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP14796b****Specification**

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**DISC1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q9NRI5](#)**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:<a href="http://www.uniprot.org/citations/19502360" target="\_blank">19502360</a>, PubMed:<a href="http://www.uniprot.org/citations/19303846" target="\_blank">19303846</a>). Required for neural progenitor proliferation in the ventricular/subventricular 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:<a href="http://www.uniprot.org/citations/19303846" target="\_blank">19303846</a>). 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:<a href="http://www.uniprot.org/citations/19502360" target="\_blank">19502360</a>). 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</a>).

target="\_blank">18955030</a>).

#### **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 coil motifs 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 gene is disrupted in a t(1;11)(q42.1;q14.3) translocation which segregates with schizophrenia and related psychiatric disorders in a large Scottish family. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq].

### **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) :