

**DISC1 Antibody (C-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS12358****Specification**

---

**DISC1 Antibody (C-Terminus) - Product Information**

Application	IHC
Primary Accession	<a href="#">Q9NR15</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	94kDa KDa

**DISC1 Antibody (C-Terminus) - Additional Information****Gene ID** 27185**Other Names**

Disrupted in schizophrenia 1 protein, DISC1, KIAA0457

**Target/Specificity**

synthetic peptide corresponding to C-terminal residues of human DISC1 (Disrupted in schizophrenia 1 protein)

**Reconstitution & Storage**

+4°C or -20°C, Avoid repeated freezing and thawing.

**Precautions**

DISC1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**DISC1 Antibody (C-Terminus) - 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>).

#### **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**

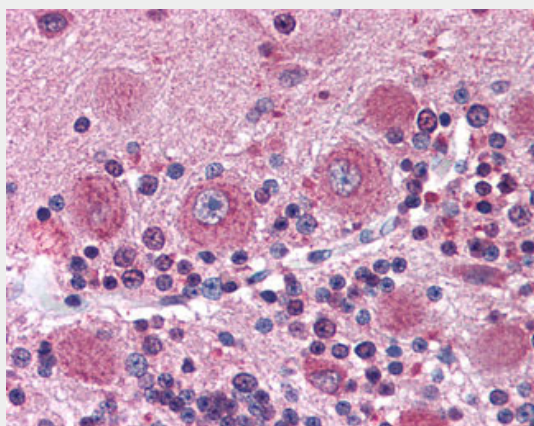
Ubiquitous. Highly expressed in the dentate gyrus of the hippocampus. Also expressed in the temporal and parahippocampal cortices and cells of the white matter.

#### **DISC1 Antibody (C-Terminus) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **DISC1 Antibody (C-Terminus) - Images**



Anti-DISC1 antibody IHC of human brain, cerebellum.

#### **DISC1 Antibody (C-Terminus) - Background**

Involved in the regulation of multiple aspects of embryonic and adult neurogenesis. Required for

neural progenitor proliferation in the ventricular/subventricular zone during embryonic brain development and in the adult dentate gyrus of the hippocampus. Participates in the Wnt-mediated neural progenitor proliferation as a positive regulator by modulating GSK3B activity and CTNNB1 abundance. 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. Inhibits the activation of AKT-mTOR signaling upon interaction with CCDC88A. Regulates the migration of early-born granule cell precursors toward the dentate gyrus during the hippocampal development. Plays a role, together with PCNT, in the microtubule network formation.

#### **DISC1 Antibody (C-Terminus) - References**

Millar J.K.,et al.Hum. Mol. Genet. 9:1415-1423(2000).  
Taylor M.S.,et al.Genomics 81:67-77(2003).  
Seki N.,et al.DNA Res. 4:345-349(1997).  
Nakata K.,et al.Proc. Natl. Acad. Sci. U.S.A. 106:15873-15878(2009).  
Gregory S.G.,et al.Nature 441:315-321(2006).