

### **DISC1** Rabbit mAb

**Catalog # AP75358** 

# **Specification**

### **DISC1** Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, IHC, IF

O9NRI5

Human, Mouse, Rat

Rabbit

Monoclonal Antibody

93611

# **DISC1** Rabbit mAb - Additional Information

Gene ID 27185

Other Names DISC1

**Dilution**WB~~1/500-1/1000
IHC~~1/50-1/100
IF~~1/50-1/200

**Format** Liquid

# **DISC1** Rabbit mAb - 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/19303846" target="\_blank">19303846</a>, PubMed:<a href="http://www.uniprot.org/citations/19502360" target="\_blank">19502360</a>). 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:<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>/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** Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# DISC1 Rabbit mAb - Images







