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DISC1 Antibody
Rabbit mAb
Catalog # AP92283

Specification

DISC1 Antibody - Product Information

Application	**WB, IHC, FC, ICC, IP**
Primary Accession	Q9NRI5
Reactivity	**Rat**
Clonality	**Monoclonal**

Other Names
C1orf136; DISC1; KIAA0457; RP4-730B13.1; SCZD9;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**93611 Da**

DISC1 Antibody - Additional Information

Dilution	**WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A IP~~N/A**
Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human DISC1**
Description	**Involved in the regulation of multiple aspects of embryonic and adult neurogenesis. Required for neural progenitor proliferation in the ventrical/subventrical zone during embryonic brain development and in the adult dentate gyrus of the hippocampus.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

DISC1 Antibody - Protein Information

Name DISC1 (HGNC:2888)

Synonyms KIAA0457

Function
Involved in the regulation of multiple aspects of embryonic and adult neurogenesis (PubMed:19303846, PubMed:<a

href="http://www.uniprot.org/citations/19502360" target="_blank">19502360). 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: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 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DISC1 Antibody - Images

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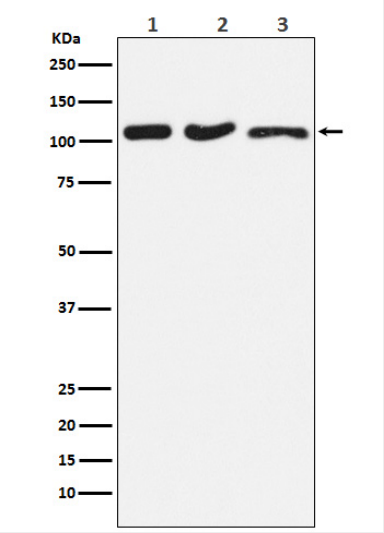

Western blot analysis of DISC1 expression in (1) HeLa cell lysate; (2) RAW264.7 cell lysate; (3) PC-12 cell lysate.