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Goat Anti-DISC1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1321a

Specification

Goat Anti-DISC1 Antibody - Product Information

Application	**WB, E**
Primary Accession	Q9NRI5
Other Accession	NP_061132, 27185
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5mg/ml**
Isotype	**IgG**
Calculated MW	**93611**

Goat Anti-DISC1 Antibody - Additional Information

Gene ID 27185

Other Names
Disrupted in schizophrenia 1 protein, DISC1, KIAA0457

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-DISC1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-DISC1 Antibody - 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, PubMed: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.

Goat Anti-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

Goat Anti-DISC1 Antibody - Images

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AF1321a (0.1 µg/ml) staining of Human Hippocampus lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-DISC1 Antibody - 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.

Goat Anti-DISC1 Antibody - References

[Disrupted-in-schizophrenia-1 (DISC1) regulates transport and translation of neuronal mRNA in hippocampal neurons] Kaibuchi K, et al. Nihon Shinkei Seishin Yakurigaku Zasshi, 2010 Jun. PMID 20666147. Common functional polymorphisms of DISC1 and cortical maturation in typically developing children and adolescents. Raznahan A, et al. Mol Psychiatry, 2010 Jul 13. PMID 20628343. Physiogenomic analysis of statin-treated patients: domain-specific counter effects within the ACACB gene on low-density lipoprotein cholesterol? Rua□o G, et al. Pharmacogenomics, 2010 Jul. PMID 20602615. Intermediate phenotypes identify divergent pathways to Alzheimer's disease. Shulman JM, et al. PLoS One, 2010 Jun 21. PMID 20574532. DISC1 regulates primary cilia that display specific dopamine receptors. Marley A, et al. PLoS One, 2010 May 28. PMID 20531939.