

DISC1 Rabbit mAb

Catalog # AP78233

Product Information

Application WB, IHC-P, IF, FC, ICC, IP

Primary Accession Q9NRI5

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human DISC1

Purification Affinity Purified

Calculated MW 93611

Additional Information

Gene ID 27185

Other Names DISC1

Dilution WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A

IP~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

Protein Information

Name DISC1 (HGNC:2888)

Synonyms KIAA0457

Function Involved in the regulation of multiple aspects of embryonic and adult

neurogenesis (PubMed:<u>19303846</u>, PubMed:<u>19502360</u>). 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:<u>19303846</u>). 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

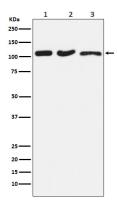
Cytoplasm. Cytoplasm, cytoskeleton Mitochondrion. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Postsynaptic density {ECO:0000250|UniProtKB:Q811T9}. Note=Colocalizes with NDEL1 in the perinuclear region and the centrosome (By similarity). Localizes to punctate cytoplasmic foci which 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.

Images



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