

DISC1 Rabbit mAb

Catalog # AP75358

Product Information

Application	WB, IHC-P, IHC-F, FC, IP
Primary Accession	Q9NRI5
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	93611

Additional Information

Gene ID	27185
Other Names	DISC1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A IHC-F~~N/A FC~~1:200-1:1000 IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
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: 19303846 , PubMed: 19502360). Required for neural progenitor proliferation in the ventral/subventral 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}

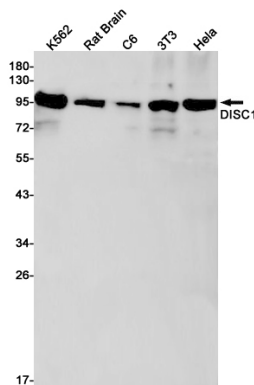
Tissue Location

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

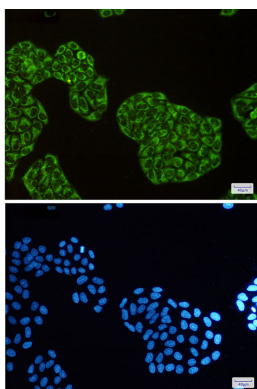
Background

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.

Images

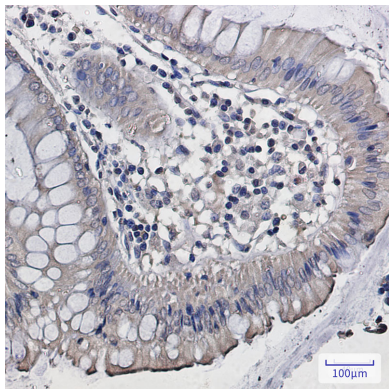
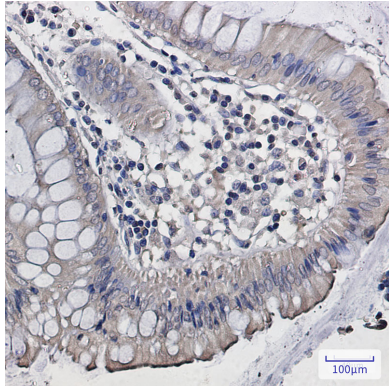
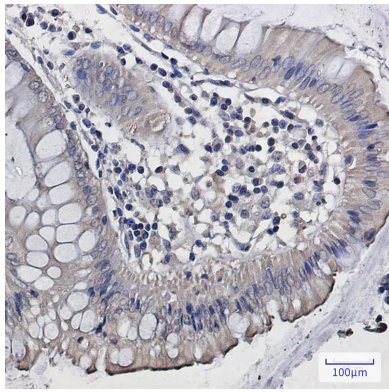


Western blot analysis of DISC1 in K562, rat Brain, C6, 3T3, HeLa lysates using DISC1 antibody.



Immunocytochemistry analysis of DISC1 (green) in HeLa using DISC1 antibody, and DAPI (blue)

Immunohistochemistry analysis of paraffin-embedded Human colon cancer using DISC1 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



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