

Anti-DISC1 Rabbit Monoclonal Antibody

Catalog # ABO15703

Specification

Anti-DISC1 Rabbit Monoclonal Antibody - Product Information

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

Primary Accession

Host
Isotype

Q9NRI5
Rabbit
IgG

Reactivity Rat, Human, Mouse

Clonality Monoclonal Format Liquid

Description

Anti-DISC1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-DISC1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 27185

Other Names

Disrupted in schizophrenia 1 protein, DISC1 (HGNC:2888), KIAA0457

Calculated MW 100 kDa KDa

Application Details

WB 1:500-1:2000
br>IHC 1:50-1:200
br>ICC/IF 1:50-1:200
br>IP 1:50
br>FC 1:50

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human DISC1

Purification

Affinity-chromatography

Storage Store at -20°C for one year. For short term

storage and frequent use, store at 4°C for

up to one month. Avoid repeated

freeze-thaw cycles.

Anti-DISC1 Rabbit Monoclonal 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: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.

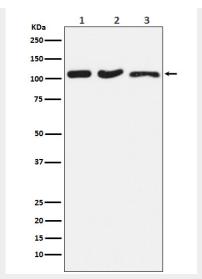
Anti-DISC1 Rabbit Monoclonal Antibody - Protocols

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

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

Anti-DISC1 Rabbit Monoclonal Antibody - Images





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