

Product datasheet for **TA336518**

DISC1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC
Recommended Dilution:	Immunohistochemistry-Frozen, Immunohistochemistry: 2.5-5.0 ug/ml, Immunocytochemistry/ Immunofluorescence: 1:100, Immunohistochemistry-Paraffin: 2.5-5ug/ml
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to an internal region (within residues 700-800) of the mouse DISC1 protein. [Swiss-Prot# Q811T9]
Formulation:	Tris-glycine, 150 mM NaCl, 0.05% Sodium Azide. Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	disrupted in schizophrenia 1
Database Link:	NP_061132 Entrez Gene 244667 Mouse Entrez Gene 307940 Rat Q9NRI5



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Background:

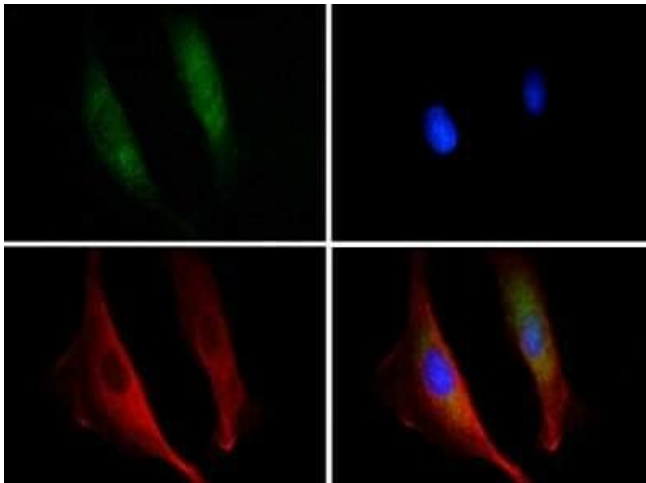
DISC1 (Disrupted in Schizophrenia 1) is a well known risk genes for psychiatric disorders including schizophrenia, major depression, bipolar disorder, and autism. DISC1 protein localize to cytoskeleton-rich regions in cells, including the centrosome, base of primary cilia, axon and dendritic shafts and spines. For serving its multiple functions, DISC1 interacts with CCDC88A, GSK3B, PCNT, tubulin alpha, ACTN2, ANKHD1, ATF4, ATF5, CEP63, EIF3S3, MAP1A, NDEL1, PAFAH1B1, RANBP9, SPTBN4, SYNE1, TRAF3IP1, CHCHD6 and NDEL1. DISC1 interaction with microtubules TRAF3IP1. In neurogenesis regulation, DISC1 is essential for neural progenitor proliferation in the ventral/subventricular zone during embryonic brain development as well as in adult dentate gyrus of hippocampus. DISC1 modulates GSK3Beta activity and CTNNB1 abundance for acting as positive regulator of WNT-mediated neural progenitor proliferation. DISC1 can modulate AKT-mTOR signaling for controlling the neuron positioning, dendritic development and synapse formation which ultimately regulate newborn neurons integration during adult neurogenesis and can regulate the migration of early-born granule cell precursors toward the dentate gyrus during the hippocampal development. Moreover, DISC1 is implicated in microtubule network formation, regulation of functional biology of centrosome as well as primary cilia, neuronal migration and microtubule mediated transport.

Synonyms:

C1orf136; SCZD9

Note:

This DISC1 antibody is useful for Immunocytochemistry/Immunofluorescence and Immunohistochemistry paraffin embedded sections. Use in Immunohistochemistry-Frozen reported in scientific literature (PMID 24560582) The theoretical molecular weight of DISC1 is ~90 kDa. Preliminary Western Blot studies have been performed with this antibody, where several non-specific bands are seen. Due to alternative splicing, DISC1 may also run at ~75 and 100 kDa. In ICC/IF, cytoplasmic staining was observed in PC12 cells.

Product images:

Immunocytochemistry/Immunofluorescence:
DISC1 Antibody TA336518 - DISC1 antibody was tested in PC-12 cells at 1:100 with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 549 (red).



Immunohistochemistry: DISC1 Antibody TA336518 - Staining of DISC1 in mouse brain neurons, glial cells, and white matter. 40X