

DISC1 (NT) antibody (pAb)

Rabbit Anti-Human/Mouse DISC1 (NT)

Instruction Manual

Catalog Number	PK-AB718-4293
Synonyms	DISC1 Antibody: Disrupted in schizophrenia 1
Description	Disrupted in schizophrenia 1 (DISC1) is a candidate gene for susceptibility to schizophrenia. It was discovered through chromosomal analysis of a large Scottish family whose members exhibited schizophrenia and related psychiatric disorders. Through yeast two-hybrid screening, it was discovered that DISC1 interacts with many members of the centrosome and cytoskeletal system including MAP1A and Nudel. More recently, DISC1 has been found to regulate the transport of a complex containing Nudel, the lissencephaly-1 (LIS1) protein, and 14-3-3e from neuronal cell bodies to the axons by the action of the microtubule-dependent directed motor protein kinesin-1, also known as KIF5A. Decreased expression of DISC1 in neurons caused an accelerated rate of neuronal integration, resulting in aberrant morphological development, suggesting that DISC1 plays a role in dendritic development and synapse formation. DISC1 has at least four known isoforms.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	DISC1 antibody was raised in rabbits against a 13 amino acid peptide from near the amino terminus of human DISC1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. DISC1 antibody can be used for detection of DISC1 by Western blot at 1 - 2 µg/mL.
Images	Available upon request.
References	Millar JK, Wilson-Annan JC, Anderson S, et al. Disruption of two novel genes by a translocation co-segregating with schizophrenia. <i>Hum. Mol. Genet.</i> 2000; 9:1415-23. Morris JA, Kandpal G, Ma L, et al. DISC1 (Disrupted-in-schizophrenia 1) is a centrosome-associated protein that interacts with MAP1A, MIPT3, ATF4/5 and NUDEL: regulation and loss of interaction with mutation. <i>Hum. Mol. Genet.</i> 2003; 12:1591-608. Taya S, Shinoda T, Tsuboi D, et al. DISC1 regulates the transport of the NUDEL/LIS1/14-3-3e complex through kinesin-1. <i>J. Neurosci.</i> 2007; 27:15-26. Duan X, Chang JH, Ge S, et al. Disrupted-in-schizophrenia 1 regulates integration of newly generated neurons in the adult brain. <i>Cell</i> 2007; 1146-58.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4293P; DISC1 Peptide Cat.No. PK-AB718-1212; 3T3 Cell Lysate

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