

Anti-DISC1 (C-terminus) Antibody
Catalog # AN1745**Specification**

Anti-DISC1 (C-terminus) Antibody - Product Information

| | |
|-------------------|--------------------------|
| Primary Accession | Q811T9 |
| Reactivity | Bovine, Chicken |
| Host | Rabbit |
| Clonality | Rabbit Polyclonal |
| Isotype | IgG |
| Calculated MW | 92525 |

Anti-DISC1 (C-terminus) Antibody - Additional Information

| | |
|-------------------------|---------------|
| Gene ID | 244667 |
| Other Names | |
| disrupted schizophrenia | |

Target/Specificity

Disrupted in schizophrenia 1 (DISC1) is a multifunctional scaffold protein that has important roles in neurodevelopment. DISC1 is expressed in both neuronal progenitor cells and postmitotic neurons in the developing cerebral cortex. DISC1 can interact with both centrosomal proteins and dynein-motor related proteins. In addition, DISC1 interacts with and inhibits the kinase GSK-3 β to enable Wnt activation of β -catenin-mediated gene transcription and neuron proliferation. These functions of DISC1 may be regulated by post-translational modification. PKA and CDK5 can phosphorylate Ser-710, and a non-phosphorylatable Ser-710 mutant shows decreased interaction with the centrosomal proteins, BBS1 and BBS4, while a constitutively phosphorylated Ser-710 mutant shows increased interaction with these proteins. During neuronal progenitor cell proliferation, DISC1 phosphorylation at Ser-710 is low and the interaction with GSK-3 β is enhanced. By contrast, DISC1 phosphorylation is increased, association with GSK-3 β is decreased, and interaction with BBS1 is enhanced during postmitotic neuron migration.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-DISC1 (C-terminus) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

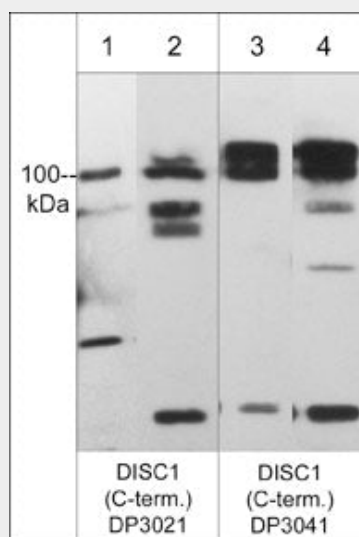
Anti-DISC1 (C-terminus) Antibody - Protocols

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

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-DISC1 (C-terminus) Antibody - Images



Western blot of DISC1 in mouse brain (lanes 1 & 3) and rat PC12 cells (lanes 2 & 4). The blots were probed with DP3021 anti-DISC1 (a.a. 740-753) (lanes 1 & 2) and DP3041 anti-DISC1 (a.a. 740-753) (lanes 3 & 4).

Anti-DISC1 (C-terminus) Antibody - Background

Disrupted in schizophrenia 1 (DISC1) is a multifunctional scaffold protein that has important roles in neurodevelopment. DISC1 is expressed in both neuronal progenitor cells and postmitotic neurons in the developing cerebral cortex. DISC1 can interact with both centrosomal proteins and dynein-motor related proteins. In addition, DISC1 interacts with and inhibits the kinase GSK-3 β to enable Wnt activation of β -catenin-mediated gene transcription and neuron proliferation. These functions of DISC1 may be regulated by post-translational modification. PKA and CDK5 can phosphorylate Ser-710, and a non-phosphorylatable Ser-710 mutant shows decreased interaction with the centrosomal proteins, BBS1 and BBS4, while a constitutively phosphorylated Ser-710 mutant shows increased interaction with these proteins. During neuronal progenitor cell proliferation, DISC1 phosphorylation at Ser-710 is low and the interaction with GSK-3 β is enhanced. By contrast, DISC1 phosphorylation is increased, association with GSK-3 β is decreased, and interaction with BBS1 is enhanced during postmitotic neuron migration.