

# Anti-DISC1 (Ser-710), Phosphospecific Antibody

Catalog # AN1747

#### **Specification**

## Anti-DISC1 (Ser-710), Phosphospecific Antibody - Product Information

Primary Accession <u>0811T9</u>

Reactivity Bovine, Chicken

Host Rabbit

Clonality Rabbit Polyclonal

Isotype IgG
Calculated MW 92525

### Anti-DISC1 (Ser-710), Phosphospecific 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 $\beta$  to enable Wnt activation of  $\beta$ -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 constituitively 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 $\beta$  is enhanced. By contrast, DISC1 phosphorylation is increased, association with GSK-3 $\beta$  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 (Ser-710), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Shipping**

Blue Ice

### Anti-DISC1 (Ser-710), Phosphospecific Antibody - Protocols

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

Western Blot

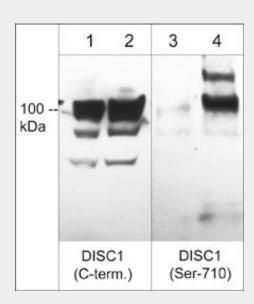




• Blocking Peptides

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

### Anti-DISC1 (Ser-710), Phosphospecific Antibody - Images



Western blot of DISC1 phosphorylation in PC12 cells untreated (lanes 1 & 3) or treated with calyculin A (100 nm) for 30 min (lanes 2 & 4). The blots were probed with DP3041 anti-DISC1 (a.a. 740-753) (lanes 1 & 2) or DP3061 anti-DISC1 (Ser-710) (lanes 3 & 4).

### Anti-DISC1 (Ser-710), Phosphospecific Antibody - Background

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