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# **Product Information**

# Anti-DISC1 (Internal)

produced in rabbit, affinity isolated antibody

Catalog Number SAB4200622

### **Product Description**

Anti-DISC1 (Internal) is produced in rabbit using as immunogen a synthetic peptide corresponding to an internal sequence in rat DISC1 (GeneID: 307940), conjugated to KLH. The corresponding sequence differs by 2 amino acids in mouse DISC1 and by 3 amino acids in human DISC1. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-DISC1 (internal) recognizes human and rat DISC1. The antibody may be used in various immunochemical techniques including immunoblotting (~90 kDa). Detection of the DISC1 band by immunoblotting is specifically inhibited by the immunizing peptide.

DISC1 (disrupted in schizophrenia 1) is a multifunctional scaffold protein that was suggested to be a risk factor for a wide array of other neurological diseases. It consists of a non-conserved N-terminal "head" domain containing nuclear localization signal and a short conserved serine/phenylalanine-rich motif, and a conserved C-terminal coiled-coil region. These structures enable DISC1 to possess many protein interaction partners that highlight its pathological relevance in molecular pathways. These include; NDE1 and NDEL1 in neuronal migration, GSK3 $\beta$  in neural progenitor proliferation and neuronal signaling as well as TNIK in synaptic function.  $^{1-2}$ 

## Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

#### **Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

# Storage/Stability

For continuous use, store at 2–8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

#### **Product Profile**

 $\frac{Immunoblotting}{Immunoblotting}: a working concentration of 1-2 \ \mu g/mL is recommended using whole extracts of rat brain P2 fraction or HEK-293T cells over-expressing human DISC1.$ 

**Note**: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

# References

- Thomson, P.A., et al., Front. Biol. (Beijing), 8, 1-31 (2013).
- 2. Kamiya, A., et al., Front. Psychiatry, 3, 25 (2012).

GG, AI,PHC 04/16-1