Human DISC1 Alexa Fluor® 488-conjugated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF6699G
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DISC1 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human DISC1 Lys101-Arg260 Accession # Q9NRI5
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

DISC1 (Disrupted in Schizophrenia 1) is a 100-105 kDa cytoplasmic and mitochondrial protein that belongs to no known molecular family. It is widely expressed, and appears to have multiple interaction partners, among which are NDEL1, α-tubulin, TRAF3IP1 and GSK-3β. DISC1 is of particular interest in the brain where it appears to play a role in both neuronal proliferation and migration. Regarding proliferation, DISC1 inhibits GSK-3β activity, resulting in neural progenitor cell proliferation without differentiation. With respect to migration, DISC1 promotes embryonic subventricular neuron migration while inhibiting widespread adult neuronal migration from the hippocampal subgranular layer. Human DISC1 is 854 amino acids (aa) in length. It contains an N-terminal globular domain (aa 1-346) plus four coiled-coil regions (aa 366-830). DISC1 is phosphorylated and forms homodimers. There are multiple isoforms. Among them is a 65-70 kDa form that shows an 18 aa substitution for aa 661-854, a 48 kDa form that contains a 20 aa substitution for aa 350-854, a 61-64 kDa form that possesses a seven aa substitution for aa 545-854, and a 90 kDa form that contains a deletion of aa 748-769. Over aa 101-260, human DISC1 shares 44% aa identity with mouse DISC1.

PRODUCT SPECIFIC NOTICES

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