SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

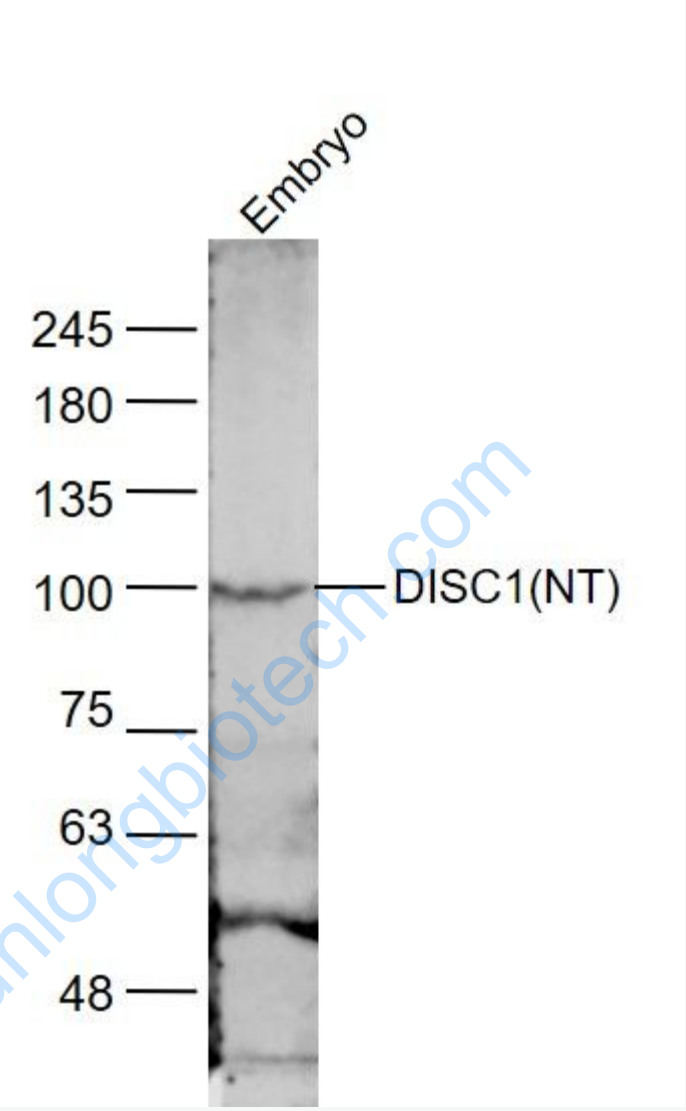
Rabbit Anti-DISC1 (NT) antibody

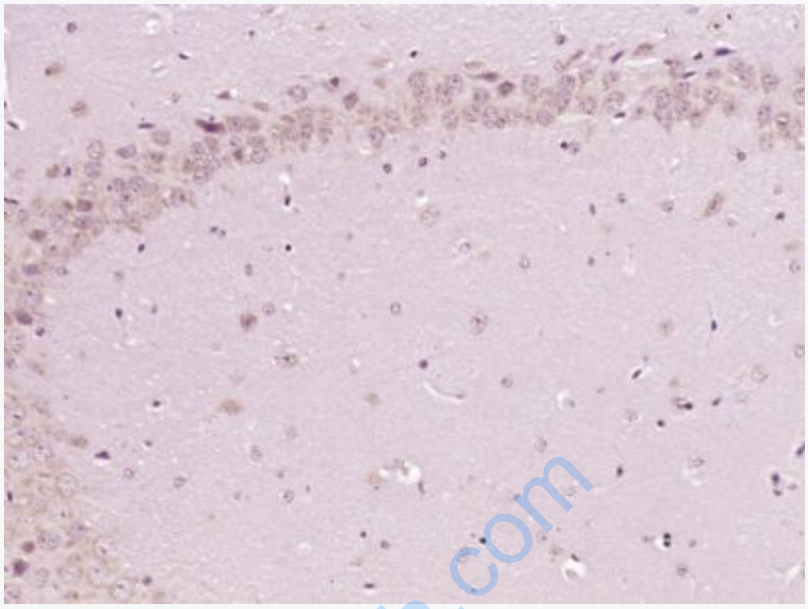
SL0428R

Product Name:	DISC1 (NT)
Chinese Name:	DISC1 N端抗体
Alias:	disrupted in schizophrenia1; C1orf136; KIAA0457; RP4-730B13.1; SCZD9; DISC1; DISC1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	92kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DISC1:101-200/854
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	DISC1 (disrupted in schizophrenia 1) is a protein with multiple coiled coil motifs which is located in the nucleus, cytoplasm and mitochondria. DISC1 is a multifunctional protein that is involved in neurite outgrowth and cortical development, through its interaction with proteins of the centrosome and cytoskeletal system, and is implicated in schizophrenia. Regions of the primate brain which express DISC1, including the hippocampus, lateral septum, amygdala, cerebral cortex, cerebellum and paraventricular

	hypothalamus, are reported to be involved in schizophrenia in humans. **Function:** Involved in the regulation of multiple aspects of embryonic and adult neurogenesis. Required for neural progenitor proliferation in the ventrical/subventrical zone during embryonic brain development and in the adult dentate gyrus of the hippocampus. Participates in the Wnt-mediated neural progenitor proliferation as a positive regulator by modulating GSK3B activity and CTNNB1 abundance. Plays a role as a modulator of the AKT-mTOR signaling pathway controlling the tempo of the process of newborn neurons integration during adult neurogenesis, including neuron positioning, dendritic development and synapse formation. Inhibits the activation of AKT-mTOR signaling upon interaction with CCDC88A. Regulates the migration of early-born granule cell precursors toward the dentate gyrus during the hippocampal development. Plays a role, together with PCNT, in the microtubule network formation. **Subcellular Location:** Cytoplasm. Cytoplasm > cytoskeleton. Cytoplasm > cytoskeleton > centrosome. Cell junction > synapse > postsynaptic cell membrane > postsynaptic density. Colocalizes with NDEL1 in the perinuclear region and the centrosome (By similarity). Localizes to punctate cytoplasmic foci which overlap in part with mitochondria. Colocalizes with PCNT at the centrosome. **Tissue Specificity:** Ubiquitous. Highly expressed in the dentate gyrus of the hippocampus. Also expressed in the temporal and parahippocampal cortices and cells of the white matter. **DISEASE:** Note=A chromosomal aberration involving DISC1 segregates with schizophrenia and related psychiatric disorders in a large Scottish family. Translocation t(1;11)(q42.1;q14.3). The truncated DISC1 protein produced by this translocation is unable to interact with ATF4, ATF5 and NDEL1. Genetic variation in DISC1 is associated with susceptibility to schizophrenia type 9 (SCZD9) [MIM:604906]. A complex, multifactorial psychotic disorder or group of disorders characterized by disturbances in the form and content of thought (e.g. delusions, hallucinations), in mood (e.g. inappropriate affect), in sense of self and relationship to the external world (e.g. loss of ego boundaries, withdrawal), and in behavior (e.g bizarre or apparently purposeless behavior). Although it affects emotions, it is distinguished from mood disorders in which such disturbances are primary. Similarly, there may be mild impairment of cognitive function, and it is distinguished from the dementias in which disturbed cognitive function is considered primary. Some patients manifest schizophrenic as well as bipolar disorder symptoms and are often given the diagnosis of schizoaffective disorder. **SWISS:** Q9NRI5

	Gene ID: 27185 **Database links:** Entrez Gene: 27185 Human Omim: 605210 Human SwissProt: Q9NRI5 Human Unigene: 13318 Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. DISC1基因是蛋白质复合体中的一部分,它对大脑皮层发育过程中细胞的正常运动很重要。 DISC-1基因的变异增加了患精神分裂症的风险。研究人员发现，抑制老鼠的DISC1活性则改变了动物大脑的发育，引起了大脑皮层轻微的变异，而在对精神分裂症病人进行尸检时在其大脑中见到了此变化。研究人员还发现将DISC1与对大脑发育和调节神经传递素水平很重要的分子信号路径联系起来，精神病患者的神经传递素水平往往是不正常的。 新研究显示DISC1蛋白质与一个叫PDE4B的酶相互作用，而影响信号传递分子cAMP的活性。这个信号传递系统过去在其它试验系统中被发现与学习、记忆、以及情绪有关，这与该系统中的变化可能促成精神分裂症是一致的。

Picture:	 Sample: Brain (Mouse) Lysate at 40 ug Primary: Anti-DISC1 (NT) (SL0428R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 92 kD Observed band size: 92 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (DISC1 (NT)) Polyclonal Antibody, Unconjugated (SL0428R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.