Datasheet for ABIN7564318

DISC1 Protein (AA 1-852) (His tag)

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Overview

Quantity:	1 mg
Target:	DISC1
Protein Characteristics:	AA 1-852
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DISC1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Disc1 Protein expressed in mammalian cells.
Sequence:	MQGGGPRGAP IHSPSHGADS GHGLPPAVAP QRRRLTRRPG YMRSTAGSGI GFLSPAVGMP HPSSAGLTGQ QSQHSQSKAG QCGLDPGSHC QASLVGKPFL KSSLVPAVAS EGHLHPAQRS MRKRPVHFAV HSKNDSRQSE RLTGSFKPGD SGFWQELLSS DSFKSLAPSL DAPWNKGSRG LKTVKPLASP ALNGPADIAS LPGFQDTFTS SFSFIQLSLG AAGERGEAEG CLPSREAEPL HQRPQEMAAE ASSSDRPHGD PRHLWTFSLH AAPGLADLAQ VTRSSSRQSE CGTVSSSSSD TGFSSQDASS AGGRGDQGGG WADAHGWHTL LREWEPMLQD YLLSNRRQLE VTSLILKLQK CQEKVVEDGD YDTAETLRQR LEELEQEKGR LSWALPSQQP ALRSFLGYLA AQIQVALHGA TQRAGSDDPE APLEGQLRTT AQDSLPASIT RRDWLIREKQ RLQKEIEALQ ARMSALEAKE KRLSQELEEQ EVLLRWPGCD LMALVAQMSP GQLQEVSKAL GETLTSANQA PFQVEPPETL RSLRERTKSL NLAVRELTAQ VCSGEKLCSS LRRRLSDLDT RLPALLEAKM LALSGSCFST AKELTEEIWA LSSEREGLEM FLGRLLALSS RNSRRLGIVK EDHLRCRQDL ALQDAAHKTR MKANTVKCME VLEGQLSSCR CPLLGRVWKA DLETCQLLMQ SLQLQEAGSS PHAEDEEQVH

Product Details

	STGEAAQTAA LAVPRTPHPE EEKSPLQVLQ EWDTHSALSP HCAAGPWKED SHIVSAEVGE KCEAIGVKLL HLEDQLLGAM YSHDEALFQS LQGELQTVKE TLQAMILQLQ PTKEAGEASA SYPTAGAQET EA **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	DISC1
Alternative Name:	Disc1 (DISC1 Products)
Background:	Disrupted in schizophrenia 1 homolog,FUNCTION: Involved in the regulation of multiple aspects of embryonic and adult neurogenesis (PubMed:17825401, PubMed:19502360, PubMed:31444471). Required for neural progenitor proliferation in the ventrical/subventrical zone during embryonic brain development and in the adult dentate gyrus of the hippocampus (PubMed:17825401, PubMed:19502360). Participates in the Wnt-mediated neural progenitor proliferation as a positive regulator by modulating GSK3B activity and CTNNB1 abundance

Target Details

	(PubMed:19303846). 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 (PubMed:19778506). Inhibits the activation of AKT-mTOR signaling upon interaction with CCDC88A (PubMed:19778506). Regulates the migration of early-born granule cell precursors toward the dentate gyrus during the hippocampal development (PubMed:19502360). Inhibits ATF4 transcription factor activity in neurons by disrupting ATF4 dimerization and DNA-binding (PubMed:31444471). Plays a role, together with PCNT, in the microtubule network formation (By similarity). {ECO:0000250|UniProtKB:Q9NRI5, ECO:0000269|PubMed:17825401, ECO:0000269|PubMed:19303846, ECO:0000269|PubMed:19502360, ECO:0000269|PubMed:19778506, ECO:0000269|PubMed:31444471}.
Molecular Weight:	92.5 kDa
UniProt:	Q811T9
Pathways:	Regulation of Cell Size

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months