Datasheet for ABIN3135841

NPC1L1 Protein (AA 21-1333) (rho-1D4 tag)

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Overview

Quantity:	1 mg
Target:	NPC1L1
Protein Characteristics:	AA 21-1333
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NPC1L1 protein is labelled with rho-1D4 tag.
Application:	Crystallization (Crys), ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	ELYTPTHKAG FCTFYEECGK NPELSGGLTS LSNISCLSNT PARHVTGDHL ALLQRVCPRL YNGPNDTYAC CSTKQLVSLD SSLSITKALL TRCPACSENF VSIHCHNTCS PDQSLFINVT RVVQRDPGQL PAVVAYEAFY QRSFAEKAYE SCSRVRIPAA ASLAVGSMCG VYGSALCNAQ RWLNFQGDTG NGLAPLDITF HLLEPGQALA DGMKPLDGKI TPCNESQGED SAACSCQDCA ASCPVIPPPP ALRPSFYMGR MPGWLALIII FTAVFVLLSV VLVYLRVASN RNKNKTAGSQ EAPNLPRKRR FSPHTVLGRF FESWGTRVAS WPLTVLALSF IVVIALSVGL TFIELTTDPV ELWSAPKSQA RKEKAFHDEH FGPFFRTNQI FVTAKNRSSY KYDSLLLGPK NFSGILSLDL LQELLELQER LRHLQVWSHE AQRNISLQDI CYAPLNPHNT SLTDCCVNSL LQYFQNNHTL LLLTANQTLN GQTSLVDWKD HFLYCANAPL TYKDGTALAL SCIADYGAPV FPFLAVGGYQ GTDYSEAEAL IITFSINNYP ADDPRMAHAK LWEEAFLKEM QSFQRSTADK FQIAFSAERS LEDEINRTTI QDLPVFAISY LIVFLYISLA LGSYSRWSRV AVDSKATLGL GGVAVVLGAV VAAMGFYSYL GVPSSLVIIQ VVPFLVLAVG ADNIFIFVLE YQRLPRMPGE QREAHIGRTL

	GSVAPSMLLC SLSEAICFFL GALTSMPAVR TFALTSGLAI IFDFLLQMTA FVALLSLDSK RQEASRPDVV CCFSSRNLPP PKQKEGLLLC FFRKIYTPFL LHRFIRPVVL LLFLVLFGAN LYLMCNISVG LDQDLALPKD SYLIDYFLFL NRYLEVGPPV YFDTTSGYNF STEAGMNAIC SSAGCESFSL TQKIQYASEF PNQSYVAIAA SSWVDDFIDW LTPSSSCCRI YTRGPHKDEF CPSTDTSFNC LKNCMNRTLG PVRPTTEQFH KYLPWFLNDT PNIRCPKGGL AAYRTSVNLS SDGQIIASQF MAYHKPLRNS QDFTEALRAS RLLAANITAE LRKVPGTDPN FEVFPYTISN VFYQQYLTVL PEGIFTLALC FVPTFVVCYL LLGLDIRSGI LNLLSIIMIL VDTIGLMAVW GISYNAVSLI NLVTAVGMSV EFVSHITRSF AVSTKPTRLE RAKDATIFMG SAVFAGVAMT NFPGILILGF AQAQLIQIFF FRLNLLITLL GLLHGLVFLP VVLSYLGPDV NQALVLEEKL ATEAAMVSEP SCPQYPFPAD ANTSDYVNYG FNPEFIPEIN AASSSLPKSD QKF **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Mouse Npc1l1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • 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 will ensure that you receive a correctly folded protein. 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

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	1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot. 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot. 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin-free.
Grade:	Crystallography grade

Target Details

Target:	NPC1L1
Alternative Name:	Npc1l1 (NPC1L1 Products)
Background:	Plays a major role in cholesterol homeostasis. Is critical for the uptake of both phytosterol and cholesterol across the plasma membrane of the intestinal enterocyte. Is the direct molecular target of ezetimibe, a drug that inhibits cholesterol absorption (By similarity). The protein may have a function in the transport of multiple lipids and their homeostasis, and may play a critical role in regulating lipid metabolism. Acts as a negative regulator of NPC2 and down-regulates its expression and secretion by inhibiting its maturation and accelerating its degradation (By similarity). {ECO:0000250, ECO:0000269|PubMed:14976318, ECO:0000269|PubMed:15173162, ECO:0000269|PubMed:15671032}.
Molecular Weight:	146.1 kDa Including tag.
UniProt:	Q6T3U4

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher

Application Details

	molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)