Datasheet for ABIN3118912

NPC1L1 Protein (AA 22-1359) (rho-1D4 tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	NPC1L1
Protein Characteristics:	AA 22-1359
Origin:	Human
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:	EPYTTIHQPG YCAFYDECGK NPELSGSLMT LSNVSCLSNT PARKITGDHL ILLQKICPRL YTGPNTQACC SAKQLVSLEA SLSITKALLT RCPACSDNFV NLHCHNTCSP NQSLFINVTR VAQLGAGQLP AVVAYEAFYQ HSFAEQSYDS CSRVRVPAAA TLAVGTMCGV YGSALCNAQR WLNFQGDTGN GLAPLDITFH LLEPGQAVGS GIQPLNEGVA RCNESQGDDV ATCSCQDCAA SCPAIARPQA LDSTFYLGQM PGSLVLIIIL CSVFAVVTIL LVGFRVAPAR DKSKMVDPKK GTSLSDKLSF STHTLLGQFF QGWGTWVASW PLTILVLSVI PVVALAAGLV FTELTTDPVE LWSAPNSQAR SEKAFHDQHF GPFFRTNQVI LTAPNRSSYR YDSLLLGPKN FSGILDLDLL LELLELQERL RHLQVWSPEA QRNISLQDIC YAPLNPDNTS LYDCCINSLL QYFQNNRTLL LLTANQTLMG QTSQVDWKDH FLYCANAPLT FKDGTALALS CMADYGAPVF PFLAIGGYKG KDYSEAEALI MTFSLNNYPA GDPRLAQAKL WEEAFLEEMR AFQRRMAGMF QVTFMAERSL EDEINRTTAE DLPIFATSYI VIFLYISLAL GSYSSWSRVM VDSKATLGLG GVAVVLGAVM AAMGFFSYLG IRSSLVILQV VPFLVLSVGA DNIFIFVLEY QRLPRRPGEP REVHIGRALG

	RVAPSMLLCS LSEAICFFLG ALTPMPAVRT FALTSGLAVI LDFLLQMSAF VALLSLDSKR QEASRLDVCC CVKPQELPPP GQGEGLLLGF FQKAYAPFLL HWITRGVVLL LFLALFGVSL YSMCHISVGL DQELALPKDS YLLDYFLFLN RYFEVGAPVY FVTTLGYNFS SEAGMNAICS SAGCNNFSFT QKIQYATEFP EQSYLAIPAS SWVDDFIDWL TPSSCCRLYI SGPNKDKFCP STVNSLNCLK NCMSITMGSV RPSVEQFHKY LPWFLNDRPN IKCPKGGLAA YSTSVNLTSD GQVLDTVAIL SPRLEYSGTI SAHCNLYLLD STSRFMAYHK PLKNSQDYTE ALRAARELAA NITADLRKVP GTDPAFEVFP YTITNVFYEQ YLTILPEGLF MLSLCLVPTF AVSCLLLGLD LRSGLLNLLS IVMILVDTVG FMALWGISYN AVSLINLVSA VGMSVEFVSH ITRSFAISTK PTWLERAKEA TISMGSAVFA GVAMTNLPGI LVLGLAKAQL IQIFFFRLNL LITLLGLLHG LVFLPVILSY VGPDVNPALA LEQKRAEEAV AAVMVASCPN HPSRVSTADN IYVNHSFEGS IKGAGAISNF LPNNGRQF **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. • Human 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

Product Details

	cells: 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 cholesterol across the plasma membrane of the intestinal enterocyte. Is the direct molecular target of ezetimibe, a drug that inhibits cholesterol absorption. Lack of activity leads to multiple lipid transport defects. 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. {ECO:0000269|PubMed:15928087, ECO:0000269|PubMed:22095670}.
Molecular Weight:	147.6 kDa Including tag.
UniProt:	Q9UHC9

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:	In cases in which it is highly likely that the recombinant protein with the default tag will be

Application Details

	insoluble our protein lab may suggest a higher 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)

Images

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process