antibodies

## Datasheet for ABIN3094184 NPC1 Protein (AA 372-620) (His tag)

Image



Overview

Quantity:	1 mg
Target:	NPC1
Protein Characteristics:	AA 372-620
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NPC1 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, Crystallization (Crys), SDS-PAGE (SDS)
Product Details	
Sequence:	RVTTNPVDLW SAPSSQARLE KEYFDQHFGP FFRTEQLIIR APLTDKHIYQ PYPSGADVPF
	GPPLDIQILH QVLDLQIAIE NITASYDNET VTLQDICLAP LSPYNTNCTI LSVLNYFQNS
	HSVLDHKKGD DFFVYADYHT HFLYCVRAPA SLNDTSLLHD PCLGTFGGPV FPWLVLGGYD
	DQNYNNATAL VITFPVNNYY NDTEKLQRAQ AWEKEFINFV KNYKNPNLTI SFTAERSIED
	ELNRESDSD
	Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a
	special request, please contact us.
Characteristics:	<ul> <li>Made in Germany - from design to production - by highly experienced protein experts.</li> <li>Human NPC1 Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade.</li> </ul>
	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

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	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:	Two step purification of proteins expressed in bacterial culture:
	<ol> <li>In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.</li> </ol>
	2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. 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:	Endotoxin has not been removed. Please contact us if you require endotoxin removal.
Grade:	Crystallography grade

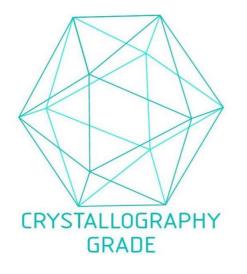
## Target Details

Target:	NPC1
Alternative Name:	NPC1 (NPC1 Products)
Background:	Intracellular cholesterol transporter which acts in concert with NPC2 and plays an important
	role in the egress of cholesterol from the endosomal/lysosomal compartment. Both NPC1 and

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	NPC2 function as the cellular 'tag team duo' (TTD) to catalyze the mobilization of cholesterol
	within the multivesicular environment of the late endosome (LE) to effect egress through the
	limiting bilayer of the LE. NPC2 binds unesterified cholesterol that has been released from LDLs
	in the lumen of the late endosomes/lysosomes and transfers it to the cholesterol-binding
	pocket of the N-terminal domain of NPC1. Cholesterol binds to NPC1 with the hydroxyl group buried in the binding pocket and is exported from the limiting membrane of late endosomes/
	lysosomes to the ER and plasma membrane by an unknown mechanism. Binds oxysterol with
	higher affinity than cholesterol. May play a role in vesicular trafficking in glia, a process that
	may be crucial for maintaining the structural and functional integrity of nerve terminals.
	{ECO:0000269 PubMed:18772377, ECO:0000269 PubMed:19563754}., (Microbial infection)
	Acts as an endosomal entry receptor for ebolavirus. {ECO:0000269 PubMed:21866103,
	ECO:0000269 PubMed:25855742}.
Molecular Weight:	29.4 kDa Including tag.
UniProt:	015118
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
	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)

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**Image 1.** "Crystallography Grade" protein due to multi-step, protein-specific purification process

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