Datasheet for ABIN7554961

PNPLA8 Protein (AA 1-782) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	PNPLA8
Protein Characteristics:	AA 1-782
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PNPLA8 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant PNPLA8 Protein expressed in mammalian cells.
Sequence:	MSINLTVDIY IYLLSNARSV CGKQRSKQLY FLFSPKHYWR ISHISLQRGF HTNIIRCKWT KSEAHSCSKH CYSPSNHGLH IGILKLSTSA PKGLTKVNIC MSRIKSTLNS VSKAVFGNQN EMISRLAQFK PSSQILRKVS DSGWLKQKNI KQAIKSLKKY SDKSAEKSPF PEEKSHIIDK EEDIGKRSLF HYTSSITTKF GDSFYFLSNH INSYFKRKEK MSQQKENEHF RDKSELEDKK VEEGKLRSPD PGILAYKPGS ESVHTVDKPT SPSAIPDVLQ VSTKQSIANF LSRPTEGVQA LVGGYIGGLV PKLKYDSKSQ SEEQEEPAKT DQAVSKDRNA EEKKRLSLQR EKIIARVSID NRTRALVQAL RRTTDPKLCI TRVEELTFHL LEFPEGKGVA VKERIIPYLL RLRQIKDETL QAAVREILAL IGYVDPVKGR GIRILSIDGG GTRGVVALQT LRKLVELTQK PVHQLFDYIC GVSTGAILAF MLGLFHMPLD ECEELYRKLG SDVFSQNVIV GTVKMSWSHA FYDSQTWENI LKDRMGSALM IETARNPTCP KVAAVSTIVN RGITPKAFVF RNYGHFPGIN SHYLGGCQYK MWQAIRASSA APGYFAEYAL GNDLHQDGGL LLNNPSALAM HECKCLWPDV PLECIVSLGT GRYESDVRNT VTYTSLKTKL SNVINSATDT EEVHIMLDGL LPPDTYFRFN PVMCENIPLD

Product Details

	ESRNEKLDQL QLEGLKYIER NEQKMKKVAK ILSQEKTTLQ KINDWIKLKT DMYEGLPFFS KL **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:	PNPLA8
Alternative Name:	PNPLA8 (PNPLA8 Products)
Background:	Calcium-independent phospholipase A2-gamma (EC 3.1.1.-) (EC 3.1.1.5) (Intracellular membrane-associated calcium-independent phospholipase A2 gamma) (iPLA2-gamma) (PNPLA-gamma) (Patatin-like phospholipase domain-containing protein 8) (iPLA2-2),FUNCTION: Calcium-independent and membrane-bound phospholipase, that catalyzes the esterolytic cleavage of fatty acids from glycerophospholipids to yield free fatty acids and lysophospholipids, hence regulating membrane physical properties and the release of lipid second messengers and growth factors (PubMed:10833412, PubMed:10744668,

Target Details

	PubMed:15695510, PubMed:15908428, PubMed:17213206, PubMed:18171998, PubMed:28442572). Hydrolyzes phosphatidylethanolamine, phosphatidylcholine and probably phosphatidylinositol with a possible preference for the former (PubMed:15695510). Has also a broad substrate specificity in terms of fatty acid moieties, hydrolyzing saturated and mono-unsaturated fatty acids at nearly equal rates from either the sn-1 or sn-2 position in diacyl phosphatidylcholine (PubMed:10833412, PubMed:10744668, PubMed:15695510, PubMed:15908428). However, has a weak activity toward polyunsaturated fatty acids at the sn-2 position, and thereby favors the production of 2-arachidonoyl lysophosphatidylcholine, a key branch point metabolite in eicosanoid signaling (PubMed:15908428). On the other hand, can produce arachidonic acid from the sn-1 position of diacyl phospholipid and from the sn-2 position of arachidonate-containing plasmalogen substrates (PubMed:15908428). Therefore, plays an important role in the mobilization of arachidonic acid in response to cellular stimuli and the generation of lipid second messengers (PubMed:15695510, PubMed:15908428). Can also hydrolyze lysophosphatidylcholine (PubMed:15695510). In the mitochondrial compartment, catalyzes the hydrolysis and release of oxidized aliphatic chains from cardiolipin and integrates mitochondrial bioenergetics and signaling. It is essential for maintaining efficient bioenergetic mitochondrial function through tailoring mitochondrial membrane lipid metabolism and composition (PubMed:28442572). {ECO:0000250|UniProtKB:Q8K1N1, ECO:0000269|PubMed:10744668, ECO:0000269|PubMed:10833412, ECO:0000269|PubMed:15695510, ECO:0000269|PubMed:15908428, ECO:0000269|PubMed:17213206, ECO:0000269|PubMed:18171998, ECO:0000269|PubMed:28442572}.
Molecular Weight:	88.5 kDa
UniProt:	Q9NP80

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

Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months