

# Datasheet for ABIN7555029

## PNPLA2 Protein (AA 1-504) (His tag)



### Overview

Quantity:	1 mg
Target:	PNPLA2
Protein Characteristics:	AA 1-504
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PNPLA2 protein is labelled with His tag.

#### **Product Details**

Purpose:	Custom-made recombinant PNPLA2 Protein expressed in mammalian cells.
Sequence:	MFPREKTWNI SFAGCGFLGV YYVGVASCLR EHAPFLVANA THIYGASAGA LTATALVTGV
	CLGEAGAKFI EVSKEARKRF LGPLHPSFNL VKIIRSFLLK VLPADSHEHA SGRLGISLTR
	VSDGENVIIS HFNSKDELIQ ANVCSGFIPV YCGLIPPSLQ GVRYVDGGIS DNLPLYELKN
	TITVSPFSGE SDICPQDSST NIHELRVTNT SIQFNLRNLY RLSKALFPPE PLVLREMCKQ
	GYRDGLRFLQ RNGLLNRPNP LLALPPARPH GPEDKDQAVE SAQAEDYSQL PGEDHILEHL
	PARLNEALLE ACVEPTDLLT TLSNMLPVRL ATAMMVPYTL PLESALSFTI RLLEWLPDVP
	EDIRWMKEQT GSICQYLVMR AKRKLGRHLP SRLPEQVELR RVQSLPSVPL SCAAYREALP
	GWMRNNLSLG DALAKWEECQ RQLLLGLFCT NVAFPPEALR MRAPADPAPA PADPASPQHQ
	LAGPAPLLST PAPEARPVIG ALGL 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. > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC) Purity: Grade: custom-made **Target Details** PNPLA2 Target: Alternative Name: PNPLA2 (PNPLA2 Products) Background: Patatin-like phospholipase domain-containing protein 2 (EC 3.1.1.3) (Adipose triglyceride lipase) (Calcium-independent phospholipase A2-zeta) (iPLA2-zeta) (EC 3.1.1.4) (Desnutrin) (Pigment epithelium-derived factor receptor) (PEDF-R) (TTS2.2) (Transport-secretion protein 2) (TTS2), FUNCTION: Catalyzes the initial step in triglyceride hydrolysis in adipocyte and nonadipocyte lipid droplets (PubMed:15550674, PubMed:15364929, PubMed:16150821, PubMed:17603008, PubMed:16239926, PubMed:34903883). Exhibits a strong preference for the hydrolysis of long-chain fatty acid esters at the sn-2 position of the glycerol backbone and acts coordinately with LIPE/HLS and DGAT2 within the lipolytic cascade (By similarity). Also possesses acylglycerol transacylase and phospholipase A2 activities (PubMed:15364929, PubMed:17032652, PubMed:17603008). Transfers fatty acid from triglyceride to retinol,

hydrolyzes retinylesters, and generates 1,3-diacylglycerol from triglycerides

(PubMed:17603008). Regulates adiposome size and may be involved in the degradation of

adiposomes (PubMed:16239926). May play an important role in energy homeostasis (By similarity). May play a role in the response of the organism to starvation, enhancing hydrolysis of triglycerides and providing free fatty acids to other tissues to be oxidized in situations of energy depletion (By similarity). Catalyzes the formation of an ester bond between hydroxy fatty acids and fatty acids derived from triglycerides or diglycerides to generate fatty acid esters of hydroxy fatty acids (FAHFAs) in adipocytes (PubMed:35676490). {ECO:0000250|UniProtKB:Q8BJ56, ECO:0000269|PubMed:15364929,

ECO:0000269|PubMed:15550674, ECO:0000269|PubMed:16150821,

ECO:0000269|PubMed:16239926, ECO:0000269|PubMed:17032652,

ECO:0000269|PubMed:17603008, ECO:0000269|PubMed:34903883,

ECO:0000269|PubMed:35676490}.

Molecular Weight: 55.3 kDa

UniProt: Q96AD5

#### **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