

Datasheet for ABIN7554958 **PLCD4 Protein (AA 1-762) (His tag)**



Overview

Quantity:	1 mg
Target:	PLCD4
Protein Characteristics:	AA 1-762
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PLCD4 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant PLCD4 Protein expressed in mammalian cells.
Sequence:	MASLLQDQLT TDQDLLLMQE GMPMRKVRSK SWKKLRYFRL QNDGMTVWHA RQARGSAKPS
	FSISDVETIR NGHDSELLRS LAEELPLEQG FTIVFHGRRS NLDLMANSVE EAQIWMRGLQ
	LLVDLVTSMD HQERLDQWLS DWFQRGDKNQ DGKMSFQEVQ RLLHLMNVEM DQEYAFSLFQ
	AADTSQSGTL EGEEFVQFYK ALTKRAEVQE LFESFSADGQ KLTLLEFLDF LQEEQKERDC
	TSELALELID RYEPSDSGKL RHVLSMDGFL SYLCSKDGDI FNPACLPIYQ DMTQPLNHYF
	ICSSHNTYLV GDQLCGQSSV EGYIRALKRG CRCVEVDVWD GPSGEPVVYH GHTLTSRILF
	KDVVATVAQY AFQTSDYPVI LSLETHCSWE QQQTMARHLT EILGEQLLST TLDGVLPTQL
	PSPEELRRKI LVKGKKLTLE EDLEYEEEEA EPELEESELA LESQFETEPE PQEQNLQNKD
	KKKKSKPILC PALSSLVIYL KSVSFRSFTH SKEHYHFYEI SSFSETKAKR LIKEAGNEFV
	QHNTWQLSRV YPSGLRTDSS NYNPQELWNA GCQMVAMNMQ TAGLEMDICD GHFRQNGGCG
	YVLKPDFLRD IQSSFHPEKP ISPFKAQTLL IQVISGQQLP KVDKTKEGSI VDPLVKVQIF
	GVRLDTARQE TNYVENNGFN PYWGQTLCFR VLVPELAMLR FVVMDYDWKS RNDFIGQYTL

	PWTCMQQGYR HIHLLSKDGI SLRPASIFVY ICIQEGLEGD ES 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).
	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 (HPL
Grade:	custom-made
Target Details	
Γarget:	PLCD4
Alternative Name:	PLCD4 (PLCD4 Products)
Background:	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase delta-4 (hPLCD4) (EC 3.1.4.11)
	(Phosphoinositide phospholipase C-delta-4) (Phospholipase C-delta-4) (PLC-delta-
	4),FUNCTION: Hydrolyzes the phosphatidylinositol 4,5-bisphosphate (PIP2) to generate 2
	second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3). DAG
	mediates the activation of protein kinase C (PKC), while IP3 releases Ca(2+) from intracellular
	stores. Required for acrosome reaction in sperm during fertilization, probably by acting as an

Target Details

	reaction. May play a role in cell growth. Modulates the liver regeneration in cooperation with
	nuclear PKC. Overexpression up-regulates the Erk signaling pathway and proliferation.
	{ECO:0000269 PubMed:15140260}., FUNCTION: [Isoform 2]: Acts as a non-receptor guanine
	nucleotide exchange factor which binds to and activates guanine nucleotide-binding protein (G-
	protein) alpha subunit GNAI3. {ECO:0000269 PubMed:30194280}.
Molecular Weight:	87.6 kDa
UniProt:	Q9BRC7

Application Details

Pathways:

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

Inositol Metabolic Process

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