

Datasheet for ABIN7562975

## PKC eta Protein (AA 1-683) (His tag)



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### Overview

Quantity:	1 mg
Target:	PKC eta (PRKCH)
Protein Characteristics:	AA 1-683
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PKC eta protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Purpose:	Custom-made recombinat Prkch Protein expressed in mammalien cells.
Sequence:	<p>MSSGTMKFNG YLRVRIGEAV GLQPTRWSLR HSLFKKGHQL LDPYLTVSVD QVRVGQTSTK</p> <p>QKTNKPTYNE EFCANVTDGG HLELAVFHET PLGYDHFVAN CTLQFQELLR TAGTSDTFEG</p> <p>WVDLEPEGKV FVVITLTGSF TEATLQRDRI FKHFTRKRQR AMRRRVHQVN GHKFMATYLR</p> <p>QPTYCSHCRE FIWGVFGKQG YQCQVCTCVV HKRCHHLIVT ACTCQNNINK VDAKIAEQRF</p> <p>GINIPHKFNV HNYKVPTFCD HCGSLLWGIM RQGLQCKICK MNVHIRCQAN VAPNCGVNAV</p> <p>ELAKTLAGMG LQPGNISPTS KLISRSTLRR QGKEGSKEGN GIGVNSSSRF GIDNFEFIRV</p> <p>LGKGSFGKVM LARIKETGEL YAVKVLKDV ILQDDDVECT MTEKRILSLA RNHPFLTQLF</p> <p>CCFQTPDRLF FVMEFVNNGD LMFHIQKSRR FDEARARFYA AEISALMFL HEKGIIYRDL</p> <p>KLDNVLLDHE GHCKLADFGM CKEGICNGVT TATFCGTPDY IAPILQEML YGPAVDWWAM</p> <p>GVLLYEMLCG HAPFEAENED DLFEAILNDE VVYPTWLHED ATGILKSFMT KNPTMRLGSL</p> <p>TQGGEHEILR HPFFKEIDWA QLNHRQLEPP FRPRIKSRED VSNFDPDFIK EEPVLTPIDE</p>

GHLPMINQDE FRNFSYVSPE LQL **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.**

Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none"><li>• Made to order protein - from design to production - by highly experienced protein experts.</li><li>• Protein expressed in mammalian cells and purified in one-step affinity chromatography</li><li>• The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li><li>• State-of-the-art algorithm used for plasmid design (Gene synthesis).</li></ul> <p>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.</p> <p>If you are not interested in a full length protein, please contact us for individual protein fragments.</p> <p>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.</p>
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	PKC eta (PRKCH)
Alternative Name:	Prkch ( <a href="#">PRKCH Products</a> )
Background:	Protein kinase C eta type (EC 2.7.11.13) (PKC-L) (nPKC-eta),FUNCTION: Calcium-independent, phospholipid- and diacylglycerol (DAG)-dependent serine/threonine-protein kinase that is involved in the regulation of cell differentiation in keratinocytes and pre-B cell receptor, mediates regulation of epithelial tight junction integrity and foam cell formation, and is required for glioblastoma proliferation and apoptosis prevention in MCF-7 cells. In keratinocytes, binds and activates the tyrosine kinase FYN, which in turn blocks epidermal growth factor receptor (EGFR) signaling and leads to keratinocyte growth arrest and differentiation. Associates with the cyclin CCNE1-CDK2-CDKN1B complex and inhibits CDK2 kinase activity, leading to RB1 dephosphorylation and thereby G1 arrest in keratinocytes. In association with RALA activates actin depolymerization, which is necessary for keratinocyte differentiation. In the pre-B cell

## Target Details

receptor signaling, functions downstream of BLNK by up-regulating IRF4, which in turn activates L chain gene rearrangement. Regulates epithelial tight junctions (TJs) by phosphorylating occludin (OCLN) on threonine residues, which is necessary for the assembly and maintenance of TJs. In association with PLD2 and via TLR4 signaling, is involved in lipopolysaccharide (LPS)-induced RGS2 down-regulation and foam cell formation. Upon PMA stimulation, mediates glioblastoma cell proliferation by activating the mTOR pathway, the PI3K/AKT pathway and the ERK1-dependent phosphorylation of ELK1. Involved in the protection of glioblastoma cells from irradiation-induced apoptosis by preventing caspase-9 activation. In camptothecin-treated MCF-7 cells, regulates NF-kappa-B upstream signaling by activating IKBKB, and confers protection against DNA damage-induced apoptosis. Promotes oncogenic functions of ATF2 in the nucleus while blocking its apoptotic function at mitochondria. Phosphorylates ATF2 which promotes its nuclear retention and transcriptional activity and negatively regulates its mitochondrial localization.

{ECO:0000269|PubMed:11106751, ECO:0000269|PubMed:18780722, ECO:0000269|PubMed:21346190}.

Molecular Weight:	77.9 kDa
UniProt:	<a href="#">P23298</a>
Pathways:	<a href="#">Myometrial Relaxation and Contraction</a> , <a href="#">Thromboxane A2 Receptor Signaling</a>

## 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 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