Datasheet for ABIN7563505

PKC gamma Protein (AA 1-697) (His tag)

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Overview

Quantity:	1 mg
Target:	PKC gamma (PRKCG)
Protein Characteristics:	AA 1-697
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PKC gamma protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat Prkcg Protein expressed in mammalien cells.
Sequence:	MAGLGPGGGD SEGGPRPLFC RKGALRQKVV HEVKSHKFTA RFFKQPTFCS HCTDFIWGIG KQGLQCQVCS FVVHRRCHEF VTFECPGAGK GPQTDDPRNK HKFRLHSYSS PTFCDHCGSL LYGLVHQGMK CSCCEMNVHR RCVRSVPSLC GVDHTERRGR LQLEIRAPTS DEIHITVGEA RNLIPMDPNG LSDPYVKLKL IPDPRNLTKQ KTKTVKATLN PVWNETFVFN LKPGDVERRL SVEVWDWDRT SRNDFMGAMS FGVSELLKAP VDGWYKLLNQ EEGEYYNVPV ADADNCSLLQ KFEACNYPLE LYERVRMGPS SSPIPSPSPS PTDSKRCFFG ASPGRLHISD FSFLMVLGKG SFGKVMLAER RGSDELYAIK ILKKDVIVQD DDVDCTLVEK RVLALGGRGP GGRPHFLTQL HSTFQTPDRL YFVMEYVTGG DLMYHIQQLG KFKEPHAAFY AAEIAIGLFF LHNQGIIYRD LKLDNVMLDA EGHIKITDFG MCKENVFPGS TTRTFCGTPD YIAPEIIAYQ PYGKSVDWWS FGVLLYEMLA GQPPFDGEDE EELFQAIMEQ TVTYPKSLSR EAVAICKGFL TKHPGKRLGS GPDGEPTIRA HGFFRWIDWE RLERLEIAPP FRPRPCGRSG ENFDKFFTRA APALTPPDRL

Product Details

	VLASIDQADF QGFTYVNPDF VHPDARSPTS PVPVPVM **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:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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, Western Blot
Grade:	custom-made

Target Details

Target:	PKC gamma (PRKCG)
Alternative Name:	Prkcg (PRKCG Products)
Background:	Protein kinase C gamma type (PKC-gamma) (EC 2.7.11.13),FUNCTION: Calcium-activated, phospholipid- and diacylglycerol (DAG)-dependent serine/threonine-protein kinase that plays diverse roles in neuronal cells and eye tissues, such as regulation of the neuronal receptors GRIA4/GLUR4 and GRIN1/NMDAR1, modulation of receptors and neuronal functions related to sensitivity to opiates, pain and alcohol, mediation of synaptic function and cell survival after ischemia, and inhibition of gap junction activity after oxidative stress. Binds and phosphorylates GRIA4/GLUR4 glutamate receptor and regulates its function by increasing plasma membrane-associated GRIA4 expression. In primary cerebellar neurons treated with the agonist 3,5-dihyidroxyphenylglycine, functions downstream of the metabotropic glutamate receptor

	GRM5/MGLUR5 and phosphorylates GRIN1/NMDAR1 receptor which plays a key role in synaptic plasticity, synaptogenesis, excitotoxicity, memory acquisition and learning. May be involved in the regulation of hippocampal long-term potentiation (LTP), but may be not necessary for the process of synaptic plasticity. May be involved in desensitization of mu-type opioid receptor-mediated G-protein activation in the spinal cord, and may be critical for the development and/or maintenance of morphine-induced reinforcing effects in the limbic forebrain. May modulate the functionality of mu-type-opioid receptors by participating in a signaling pathway which leads to the phosphorylation and degradation of opioid receptors. May also contribute to chronic morphine-induced changes in nociceptive processing. Plays a role in neuropathic pain mechanisms and contributes to the maintenance of the allodynia pain produced by peripheral inflammation. Plays an important role in initial sensitivity and tolerance to ethanol, by mediating the behavioral effects of ethanol as well as the effects of this drug on the GABA(A) receptors. During and after cerebral ischemia modulate neurotransmission and cell survival in synaptic membranes, and is involved in insulin-induced inhibition of necrosis, an important mechanism for minimizing ischemic injury. Required for the elimination of multiple climbing fibers during innervation of Purkinje cells in developing cerebellum. Is activated in lens epithelial cells upon hydrogen peroxide treatment, and phosphorylates connexin-43 (GJA1/CX43), resulting in disassembly of GJA1 gap junction plaques and inhibition of gap junction activity which could provide a protective effect against oxidative stress. Phosphorylates p53/TP53 and promotes p53/TP53-dependent apoptosis in response to DNA damage. Involved in the phase resetting of the cerebral cortex circadian clock during temporally restricted feeding. Stabilizes the core clock component BMAL1 by interfering with its ubiquitination, thus suppressing its degradation, resulting in phase resetting of the cerebral cortex clock (PubMed:23185022). {ECO:0000269|PubMed:11246146, ECO:0000269|PubMed:11278552, ECO:0000269|PubMed:11356858, ECO:0000269|PubMed:11731061, ECO:0000269|PubMed:17904530, ECO:0000269|PubMed:23185022, ECO:0000269|PubMed:8269509, ECO:0000269|PubMed:9323205}.
Molecular Weight:	78.4 kDa
UniProt:	P63318
Pathways:	WNT Signaling, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Thyroid Hormone Synthesis, Myometrial Relaxation and Contraction, G-protein mediated Events, Positive Regulation of Response to DNA Damage Stimulus, Interaction of EGFR with phospholipase C-gamma, Thromboxane A2 Receptor Signaling, VEGF Signaling

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