

## Product datasheet for PH308502

### PKC gamma (PRKCG) (NM\_002739) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	PRKCG MS Standard C13 and N15-labeled recombinant protein (NP_002730)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC208502
Predicted MW:	78.4 kDa
Protein Sequence:	>RC208502 protein sequence Red=Cloning site Green=Tags(s)

MAGLPGVGDSEGGPRPLFCRKALRQKVVHEVKSHKFTARFFKQPTFCSHCTDFIWGIGKQGLQCQVCS  
FVYHRRCHEFVTFECPGAGKGPQTDDPRNKHKFRLLHSYSSPTFCDHCGSLLYGLVHQGMKSCCEMNVHR  
RCVRSVPSLTCGV DHTERRGLQLEIRAPTAD EIHVTVGEARNLIPMDPNGLSDPYVKLKLIPDPRNLTKQ  
KTRTVKATLNPVWNETFVFNLPKPGDVERRLSVEVWDWDRSRNDFMGAMSGVSELLKAPVDGWYKLLNQ  
EEGEYYNVPVADADNCSLLQKFEACNYPLELYERVRMGPSSSIPSPSPSPTDPKRCFFGASPGRLHISD  
FSFLMVLGKGSFGKVMLAERRGSDLEYAIKILKKDVIQDDDVDCTLVEKRVLALGGRPGGRRPHFLTQL  
HSTFQTPDRLYFVMEYVTGGDLMYHIQQLGKFKEPAAAFYAAEIAIGLFFLHNQGIYRDLKLDNVMLDA  
EGHIKITDFGMCKENVFPGTTTTRTFCGTPDYIAPEIIAYQPYGKSDWWSFGVLLYEMLAGQPPFDGEDE  
EELFQAI MEQTVTYPKSL SREAVAICKGFLTKHPGKRLGSGPDGEPTIRAHGFFRWDWLERLERLEIPPP  
FRPRPCGRSGENFDKFFTRAAPALTPDRLVLASIDQADFQGFYVNPDPFVHPDARSPTSPVPVPM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_002730</a>
RefSeq Size:	3143



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RefSeq ORF: 2091

Synonyms: PKC-gamma; PKCC; PKCG; PKCgamma; PKCI(3); SCA14

Locus ID: 5582

UniProt ID: [P05129](#)

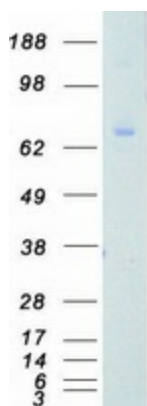
Cytogenetics: 19q13.42

**Summary:** Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play distinct roles in cells. The protein encoded by this gene is one of the PKC family members. This protein kinase is expressed solely in the brain and spinal cord and its localization is restricted to neurons. It has been demonstrated that several neuronal functions, including long term potentiation (LTP) and long term depression (LTD), specifically require this kinase. Knockout studies in mice also suggest that this kinase may be involved in neuropathic pain development. Defects in this protein have been associated with neurodegenerative disorder spinocerebellar ataxia-14 (SCA14). Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015]

**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Calcium signaling pathway, ErbB signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, Leukocyte transendothelial migration, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Natural killer cell mediated cytotoxicity, Non-small cell lung cancer, Pathways in cancer, Phosphatidylinositol signaling system, Tight junction, Vascular smooth muscle contraction, VEGF signaling pathway, Vibrio cholerae infection, Wnt signaling pathway

### Product images:



Coomassie blue staining of purified PRKCG protein (Cat# [TP308502]). The protein was produced from HEK293T cells transfected with PRKCG cDNA clone (Cat# [RC208502]) using MegaTran 2.0 (Cat# [TT210002]).