

Product datasheet for PH309900

PRKAR2B (NM_002736) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	PRKAR2B MS Standard C13 and N15-labeled recombinant protein (NP_002727)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC209900
Predicted MW:	46.3 kDa
Protein Sequence:	>RC209900 protein sequence Red=Cloning site Green=Tags(s)

MSIEIPAGLTELQGFTEVLRHQPADLLEFALQHFTRLQQENERKGTARFCHEGRTWGDLGAAAGGGTP
SKGVNFAEPMQSDSEDEEEEEAAPADAGAFNAPVINRFTRRASVCAEAYNPDEEEDDAESRIIHPKTDD
QRNRLQEACKDILLFKNLDPEQMSQVLDAMFEKLVKDGEHVIDQGDDGDNFYVIDRGTFDIYVKCDGVGR
CVGNVDNRGSFGELALMYNTPRAATITATSPGALWGLDRVTFRRRIIVKNNAKKRKMYESFIESLPFLKSL
EFSERLKVVDVIGTKVYNDGEQIIAQGDSADSFFIVESGEVKITMKRKGKSEVEENGAVEIARCSRQYF
GELALVTNKPRAASAHAIQTVKCLAMDVQAFERLLGPCMEIMKRNIATYEEQLVALFGTNMDIVEPTA

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- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-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:	<u>NP_002727</u>
RefSeq Size:	3678
RefSeq ORF:	1254
Synonyms:	PRKAR2; RII-BETA
Locus ID:	5577



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UniProt ID: [P31323](#), [A0A024R712](#), [B3KY43](#)

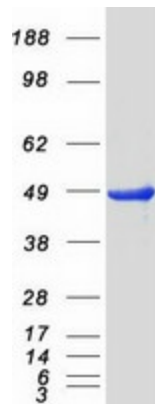
Cytogenetics: 7q22.3

Summary: cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits have been identified in humans. The protein encoded by this gene is one of the regulatory subunits. This subunit can be phosphorylated by the activated catalytic subunit. This subunit has been shown to interact with and suppress the transcriptional activity of the cAMP responsive element binding protein 1 (CREB1) in activated T cells. Knockout studies in mice suggest that this subunit may play an important role in regulating energy balance and adiposity. The studies also suggest that this subunit may mediate the gene induction and cataleptic behavior induced by haloperidol. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome

Protein Pathways: Apoptosis, Insulin signaling pathway

Product images:



Coomassie blue staining of purified PRKAR2B protein (Cat# [TP309900]). The protein was produced from HEK293T cells transfected with PRKAR2B cDNA clone (Cat# [RC209900]) using MegaTran 2.0 (Cat# [TT210002]).