

Product datasheet for TP309900M

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

PRKAR2B (NM_002736) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human protein kinase, cAMP-dependent, regulatory, type II, beta

(PRKAR2B), 100 µg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC209900 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MSIEIPAGLTELLQGFTVEVLRHQPADLLEFALQHFTRLQQENERKGTARFCHEGRTWGDLGAAAGGGTP SKGVNFAEEPMQSDSEDGEEEEAAPADAGAFNAPVINRFTRRASVCAEAYNPDEEEDDAESRIIHPKTDD QRNRLQEACKDILLFKNLDPEQMSQVLDAMFEKLVKDGEHVIDQGDDGDNFYVIDRGTFDIYVKCDGVGR CVGNYDNRGSFGELALMYNTPRAATITATSPGALWGLDRVTFRRIIVKNNAKKRKMYESFIESLPFLKSL EFSERLKVVDVIGTKVYNDGEQIIAQGDSADSFFIVESGEVKITMKRKGKSEVEENGAVEIARCSRGQYF GELALVTNKPRAASAHAIGTVKCLAMDVQAFERLLGPCMEIMKRNIATYEEQLVALFGTNMDIVEPTA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK
Predicted MW: 46.1 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 002727





Locus ID: 5577

UniProt ID: <u>P31323</u>, <u>A0A024R712</u>, <u>B3KY43</u>

RefSeq Size: 3678 Cytogenetics: 7q22.3 RefSeq ORF: 1254

Synonyms: PRKAR2; RII-BETA

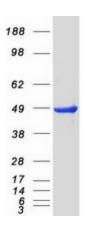
Summary: cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its

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]).