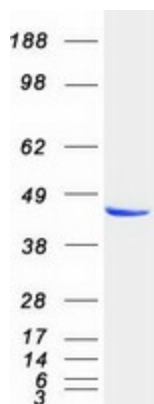


Locus ID:	5576
UniProt ID:	P13861 , A0A024R2W3
RefSeq Size:	2381
Cytogenetics:	3p21.31
RefSeq ORF:	1212
Synonyms:	PKR2; PRKAR2

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. It may interact with various A-kinase anchoring proteins and determine the subcellular localization of cAMP-dependent protein kinase. This subunit has been shown to regulate protein transport from endosomes to the Golgi apparatus and further to the endoplasmic reticulum (ER). [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome
Protein Pathways: Apoptosis, Insulin signaling pathway

Product images:



Coomassie blue staining of purified PRKAR2A protein (Cat# [TP320376]). The protein was produced from HEK293T cells transfected with PRKAR2A cDNA clone (Cat# [RC220376]) using MegaTran 2.0 (Cat# [TT210002]).