

## Product datasheet for TP320376M

## OriGene Technologies, Inc.

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## PKA R2 (PRKAR2A) (NM\_004157) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

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

(PRKAR2A), 100 µg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC220376 representing NM\_004157

or AA Sequence: Red=Cloning site Green=Tags(s)

MSHIQIPPGLTELLQGYTVEVLRQQPPDLVEFAVEYFTRLREARAPASVLPAATPRQSLGHPPPEPGPDR VADAKGDSESEEDEDLEVPVPSRFNRRVSVCAETYNPDEEEEDTDPRVIHPKTDEQRCRLQEACKDILLF KNLDQEQLSQVLDAMFERIVKADEHVIDQGDDGDNFYVIERGTYDILVTKDNQTRSVGQYDNRGSFGELA LMYNTPRAATIVATSEGSLWGLDRVTFRRIIVKNNAKKRKMFESFIESVPLLKSLEVSERMKIVDVIGEK IYKDGERIITQGEKADSFYIIESGEVSILIRSRTKSNKDGGNQEVEIARCHKGQYFGELALVTNKPRAAS

AYAVGDVKCLVMDVQAFERLLGPCMDIMKRNISHYEEQLVKMFGSSVDLGNLGQ

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

Predicted MW: 45.3 kDa

Concentration:  $>0.05 \mu g/\mu L$  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 004148





Locus ID: 5576

UniProt ID: <u>P13861</u>, <u>A0A024R2W3</u>

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

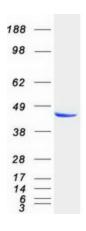
effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a 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]).