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# Product datasheet for PH320376

## PKA R2 (PRKAR2A) (NM_004157) Human Mass Spec Standard

### Product data:

| | |
|---|---|
| **Product Type:** | Mass Spec Standards |
| **Description:** | PRKAR2A MS Standard C13 and N15-labeled recombinant protein (NP_004148) |
| **Species:** | Human |
| **Expression Host:** | HEK293 |
| **Expression cDNA Clone or AA Sequence:** | RC220376 |
| **Predicted MW:** | 45.3 kDa |
| **Protein Sequence:** | >RC220376 representing NM_004157<br>Red=Cloning site Green=Tags(s)<br><br>MSHIQIPPGLTELLQGYTVEVLRQQPPDLVEFAVEYFTRLREARAPASVLPAATPRQSLGHPPPEPGPDR<br>VADAKGDSESEEDEDLEVPVPSRFNRRVSVCAETYNPDEEEEDTDPRVIHPKTDEQRCRLQEACKDILLF<br>KNLDQEQLSQVLDAMFERIVKADEHVIDQGDDGDNFYVIERGTYDILVTKDNQTRSVGQYDNRGSFGELA<br>LMYNTPRAATIVATSEGSLWGLDRVTFRRIIVKNNAKKRKMFESFIESVPLLKSLEVSERMKIVDVIGEK<br>IYKDGERIITQGEKADSFYIIESGEVSILIRSRTKSNKDGGNQEVEIARCHKGQYFGELALVTNKPRAAS<br>AYAVGDVKCLVMDVQAFERLLGPCMDIMKRNISHYEEQLVKMFGSSVDLGNLGQ<br><br>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:** | NP_004148 |
| **RefSeq Size:** | 2381 |
| **RefSeq ORF:** | 1212 |
| **Synonyms:** | PKR2; PRKAR2 |
| **Locus ID:** | 5576 |

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**UniProt ID:** P13861, A0A024R2W3

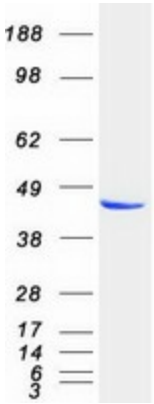
**Cytogenetics:** 3p21.31

**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]).