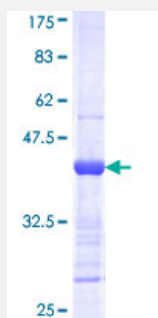


PRKAR2B (Human) Recombinant Protein (Q01)

Catalog # H00005577-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human PRKAR2B partial ORF (NP_002727, 304 a.a. - 413 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	IAQGDSADSFFIVESGEVKITMKRKGKSEVEENGAVEIARCSRGQYFGELALVTNKPRAASAHAIG TVKCLAMDVQA FERLLGPCMEIMKRNIATYEEQLVALFGTNMDI
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	37.84
Interspecies Antigen Sequence	Mouse (98); Rat (96)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — PRKAR2B

Entrez GeneID [5577](#)

GeneBank Accession# [NM_002736](#)

Protein Accession# [NP_002727](#)

Gene Name PRKAR2B

Gene Alias PRKAR2, RII-BETA

Gene Description protein kinase, cAMP-dependent, regulatory, type II, beta

Omim ID [176912](#)

Gene Ontology [Hyperlink](#)

Gene 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]

Other Designations H_RG363E19.2|WUGSC:H_RG363E19.2|cAMP-dependent protein kinase type II-beta regulatory chain|cAMP-dependent protein kinase, regulatory subunit beta 2

Pathway

- [Apoptosis](#)
- [Insulin signaling pathway](#)