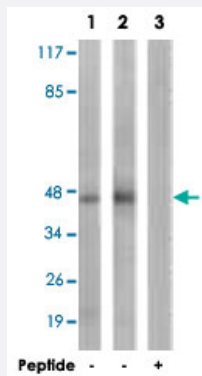


# PRKAR2B polyclonal antibody

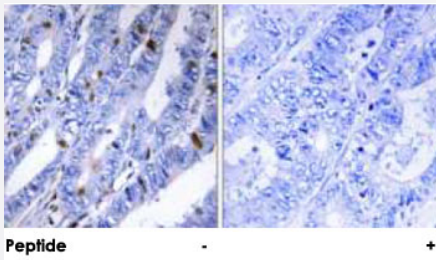
Catalog # PAB18374      Size 100 ug

## Applications



### Western Blot (Cell lysate)

Western blot analysis of extracts from HepG2 cells (Lane 1) and K-562 cells (Lane 2 and 3), using PRKAR2B polyclonal antibody (Cat # PAB18374). Peptide "+" means "peptide blocking".



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using PRKAR2B polyclonal antibody (Cat # PAB18374). Peptide "+" means "peptide blocking".

## Specification

|                     |  |
|---------------------|--|
| Product Description | Rabbit polyclonal antibody raised against synthetic peptide of PRKAR2B.          |
| Immunogen           | A synthetic peptide corresponding to residues surrounding S113 of human PRKAR2B. |
| Host                | Rabbit   |
| Reactivity          | Human, Mouse, Rat  |
| Specificity         | This antibody is specific to PRKAR2B.  |
| Form                | Liquid   |

|                            |  |
|----------------------------|--|
| <b>Purification</b>        | Affinity purification  |
| <b>Concentration</b>       | 1 mg/mL  |
| <b>Recommend Usage</b>     | Western Blot (1:500-1:1000)<br>Immunohistochemistry (1:50-1:100)<br>ELISA (1:5000)<br>The optimal working dilution should be determined by the end user. |
| <b>Storage Buffer</b>      | In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)  |
| <b>Storage Instruction</b> | Store at -20°C.<br>Aliquot to avoid repeated freezing and thawing.   |
| <b>Note</b>                | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.                                   |

## Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from HepG2 cells (Lane 1) and K-562 cells (Lane 2 and 3), using PRKAR2B polyclonal antibody (Cat # PAB18374).

Peptide "+" means "peptide blocking".

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using PRKAR2B polyclonal antibody (Cat # PAB18374).

Peptide "+" means "peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — PRKAR2B

|                           |   |
|---------------------------|---|
| <b>Entrez GeneID</b>      | <a href="#">5577</a>                                      |
| <b>Protein Accession#</b> | <a href="#">P31323</a>                                    |
| <b>Gene Name</b>          | PRKAR2B   |
| <b>Gene Alias</b>         | PRKAR2, RII-BETA  |
| <b>Gene Description</b>   | protein kinase, cAMP-dependent, regulatory, type II, beta |
| <b>Omim ID</b>            | <a href="#">176912</a>                                    |

## 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

## Publication Reference

- [Small Hepatitis B Virus Surface Antigen Promotes Hepatic Gluconeogenesis via Enhancing Glucagon/cAMP/Protein Kinase A/CREB Signaling.](#)

Yan Chen, Biao Wang, Xiaowei Ou, Yidan Wu, Yun He, Xinjian Lin, Xu Lin.

Journal of Virology 2022 Dec; 96(23):e0102022.

Application: WB-Ce, Human, Mouse, Huh7 cells, Mouse liver

- [Complete sequencing and characterization of 21,243 full-length human cDNAs.](#)

Ota T, Suzuki Y, Nishikawa T, Otsuki T, Sugiyama T, Irie R, Wakamatsu A, Hayashi K, Sato H, Nagai K, Kimura K, Makita H, Sekine M, Obayashi M, Nishi T, Shibahara T, Tanaka T, Ishii S, Yamamoto J, Saito K, Kawai Y, Isono Y, Nakamura Y, Nagahari K, Murakami K, Yasuda T, Iwayanagi T, Wagatsuma M, Shiratori A, Sudo H, Hosoiri T, Kaku Y, Kodaira H, Kondo H, Sugawara M, Takahashi M, Kanda K, Yokoi T, Furuya T, Kikkawa E, Omura Y, Abe K, Kamihara K, Katsuta N, Sato K, Tanikawa M, Yamazaki M, Ninomiya K

Nature Genetics 2003 Dec; 36(1):40.

- [Human chromosome 7: DNA sequence and biology.](#)

Scherer SW, Cheung J, MacDonald JR, Osborne LR, Nakabayashi K, Herbrick JA, Carson AR, Parker-Katiraei L, Skaug J, Khaja R, Zhang J, Hudek AK, Li M, Haddad M, Duggan GE, Fernandez BA, Kanematsu E, Gentles S, Christopoulos CC, Choufani S, Kwasnicka D, Zheng XH, Lai Z, Nusskern D, Zhang Q, Gu Z, Lu F, Zeesman S, Nowaczyk MJ, Teshima I, Chitayat D, Shuman C, Weksberg R, Zackai EH, Grebe TA, Cox SR, Kirkpatrick SJ, Rahman N, Friedman JM, Heng HH, Pelicci PG, Lo-Coco F, Belloni E, Shaffer LG, Pober B

Science 2003 Apr; 300(5620):767.

## Pathway

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