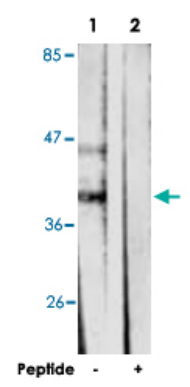
PRKACA polyclonal antibody

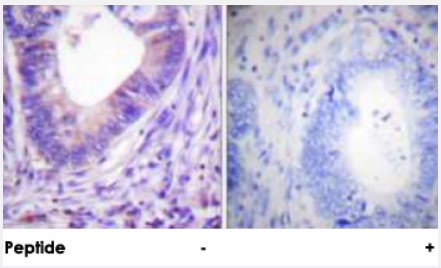
Catalog # PAB18208 Size 100 ug

Applications



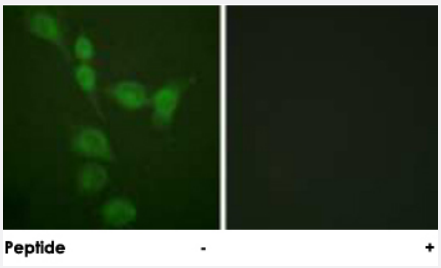
Western Blot (Tissue lysate)

Western blot analysis of extracts from mouse brain cells, using PRKACA polyclonal antibody (Cat # PAB18208).
Peptide "+" means "peptide blocking".



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

Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using PRKACA polyclonal antibody (Cat # PAB18208).
Peptide "+" means "peptide blocking".



Immunofluorescence

Immunofluorescence analysis of A-549 cells, using PRKACA polyclonal antibody (Cat # PAB18208).
Peptide "+" means "peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PRKACA.

Immunogen	A synthetic peptide corresponding to residues surrounding T197 of human PRKACA.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to PRKACA.
Form	Liquid
Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) Immunofluorescence (1:500-1:1000) ELISA (1:20000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

  Western blot analysis of extracts from mouse brain cells, using PRKACA polyclonal antibody (Cat # PAB18208).
  Peptide "+" means "peptide blocking".

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

  Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using PRKACA polyclonal antibody (Cat # PAB18208).
  Peptide "+" means "peptide blocking".

- Immunofluorescence

  Immunofluorescence analysis of A-549 cells, using PRKACA polyclonal antibody (Cat # PAB18208).
  Peptide "+" means "peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PRKACA

Entrez GeneID	5566
Protein Accession#	P17612
Gene Name	PRKACA
Gene Alias	MGC102831, MGC48865, PKACA
Gene Description	protein kinase, cAMP-dependent, catalytic, alpha
Omim ID	601639
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 phosphoryl ation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two r egulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme int o a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. F our different regulatory subunits and three catalytic subunits have been identified in humans. The p rotein encoded by this gene is a member of the Ser/Thr protein kinase family and is a catalytic su bunit of cAMP-dependent protein kinase. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq
Other Designations	PKA C-alpha|cAMP-dependent protein kinase catalytic subunit alpha|cAMP-dependent protein ki nase catalytic subunit alpha, isoform 1|protein kinase A catalytic subunit

Gene Info — PRKACB

Entrez GeneID	5567
Protein Accession#	P17612
Gene Name	PRKACB
Gene Alias	DKFZp781I2452, MGC41879, MGC9320, PKACB
Gene Description	protein kinase, cAMP-dependent, catalytic, beta
Omim ID	176892
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 a member of the Ser/Thr protein kinase family and is a catalytic subunit of cAMP-dependent protein kinase. Three alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq
Other Designations	OTTHUMP00000011663|OTTHUMP00000011664|OTTHUMP00000011666|PKA C-beta|cAMP-dependent protein kinase catalytic beta subunit isoform 4ab|cAMP-dependent protein kinase catalytic subunit beta|protein kinase A catalytic subunit beta

Publication Reference

- Identification of ChChd3 as a novel substrate of the cAMP-dependent protein kinase (PKA) using an analog-sensitive catalytic subunit.

  Schauble S, King CC, Darshi M, Koller A, Shah K, Taylor SS.

  The Journal of Biological Chemistry 2007 May; 282(20):14952.

Pathway

- Apoptosis
- Apoptosis
- Calcium signaling pathway
- Calcium signaling pathway
- Chemokine signaling pathway
- Chemokine signaling pathway
- Gap junction
- Gap junction
- GnRH signaling pathway
- GnRH signaling pathway
- Hedgehog signaling pathway

- Hedgehog signaling pathway
- Insulin signaling pathway
- Insulin signaling pathway
- Long-term potentiation
- Long-term potentiation
- MAPK signaling pathway
- MAPK signaling pathway
- Melanogenesis
- Melanogenesis
- Olfactory transduction
- Olfactory transduction
- Prion diseases
- Prion diseases
- Taste transduction
- Taste transduction
- Vascular smooth muscle contraction
- Vascular smooth muscle contraction
- Vibrio cholerae infection
- Vibrio cholerae infection
- Wnt signaling pathway
- Wnt signaling pathway

Disease

- Alzheimer disease
- Cardiovascular Diseases
- Diabetes Complications

- Metabolic Syndrome X
- Neoplasms
- Osteoporosis