

## Product datasheet for **TA385041**

### PRKACA Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	WB: 1/500-1/2000 IHC: 1/100-1/300 IF: 1/200-1/1000 ELISA: 1/10000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized peptide derived from human PKA CAT around the phosphorylation site of Thr197. AA range:166-215 (Phosphorylated)
Formulation:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Concentration:	lot specific
Purification:	Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Observed MW (kDa):40
Gene Name:	protein kinase cAMP-activated catalytic subunit alpha
Database Link:	<a href="#">Entrez Gene 5566 Human P17612</a>

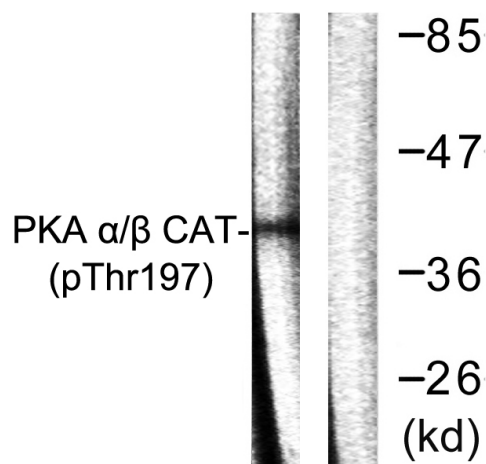
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**Background:**

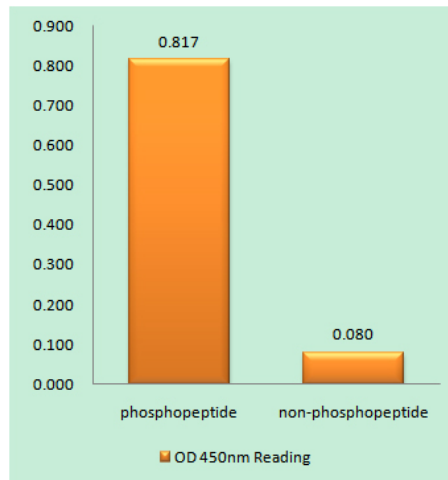
Swiss-Prot Acc.P17612/P22694/P22612.PRKACA (protein kinase cAMP-activated catalytic subunit alpha) encodes one of the catalytic subunits of protein kinase A, which exists as a tetrameric holoenzyme with two regulatory subunits and two catalytic subunits, in its inactive form. cAMP causes the dissociation 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. cAMP-dependent phosphorylation of proteins by protein kinase A is important to many cellular processes, including differentiation, proliferation, and apoptosis. Constitutive activation of this gene caused either by somatic mutations, or genomic duplications of regions that include this gene, have been associated with hyperplasias and adenomas of the adrenal cortex and are linked to corticotropin-independent Cushing's syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms. Tissue-specific isoforms that differ at the N-terminus have been described, and these isoforms may differ in the post-translational modifications that occur at the N-terminus of some isoforms.

**Synonyms:**

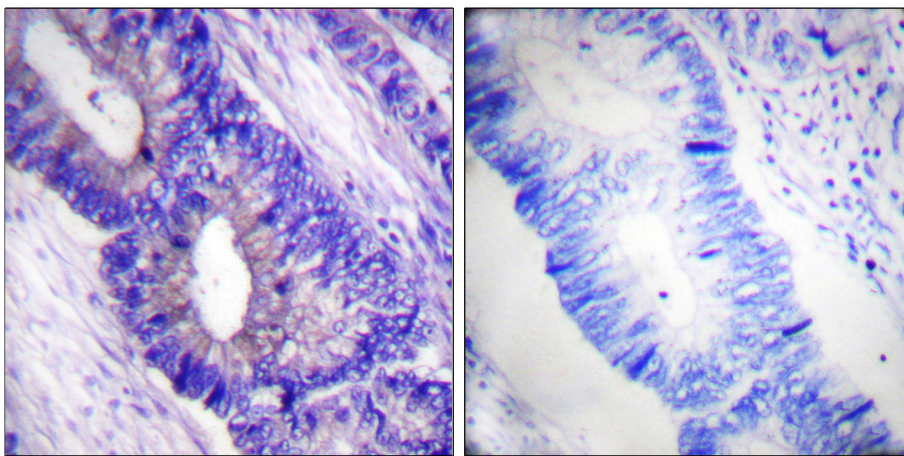
MGC48865; MGC102831; PKACA

**Product images:**


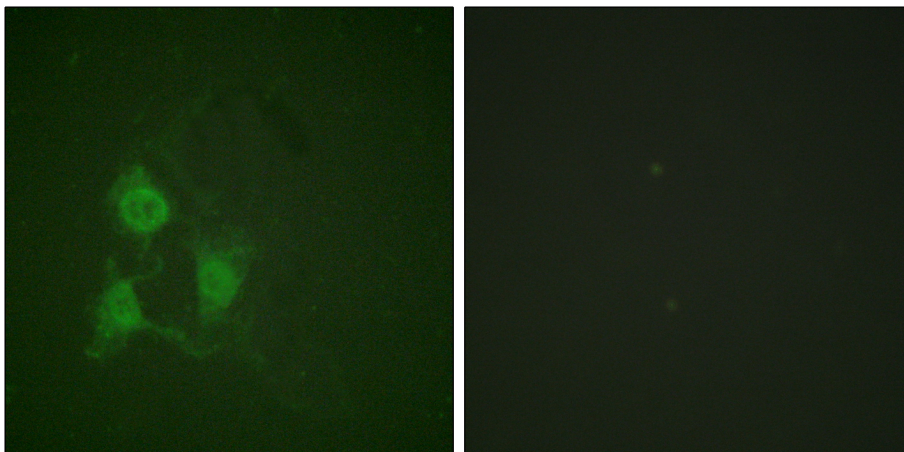
Western blot analysis of Phospho-PKA alpha/beta/gamma (Thr197) in mouse brain lysates using Phospho-PKA alpha/beta/gamma (Thr197) antibody. The lane on the right is blocked with the synthesized peptide.



EnzymeLinked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phospho-peptide (Phospho-left) and NonPhospho-peptide (Phospho-right), using PKA CAT (Phospho-Thr19antibody



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using Phospho-PKA alpha/beta/gamma (Thr197) antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval. Sample with blocking peptide on the right.



Immunofluorescence analysis of Phospho-PKA alpha/beta/gamma (Thr197) in A549 using Phospho-PKA alpha/beta/gamma (Thr197) antibody. The picture on the right is blocked with the Phospho- peptide.