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Product datasheet for AP01230PU-N

PRKACA Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	**Western Blot:** 1/500-1/1000. **Immunofluorescence**: 1/50-1/200. **Immunohistochemistry on paraffin sections:** 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to the N-terminus of Human PKAα.
Specificity:	This antibody detects endogenous levels of PKAalpha/beta cat protein. (region surrounding Lys17)
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE). Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Predicted Protein Size:	~40 kDa
Gene Name:	protein kinase cAMP-activated catalytic subunit alpha
Database Link:	Entrez Gene 5566 Human P17612

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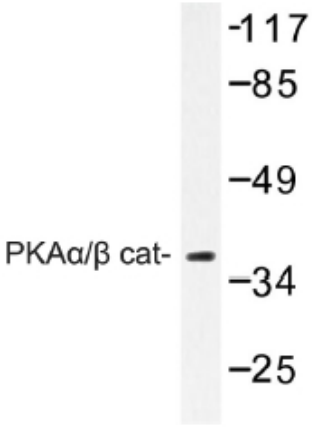
Background: The second messenger cyclic AMP (cAMP) mediates diverse cellular responses to external signals such as proliferation, ion transport, regulation of metabolism and gene transcription by activation of the cAMP-dependent protein kinase (cAPK or PKA). Activation of PKA occurs when cAMP binds to the two regulatory subunits of the tetrameric PKA holoenzyme resulting in release of active catalytic subunits. Three catalytic (C) subunits have been identified, designated Calpha, Cbeta and Cgamma, that each represent specific gene products. Calpha and Cbeta are closely related (93% amino acid sequence similarity), whereas Cgamma displays 83% and 79% similarity to Calpha and Cbeta, respectively. Activation of transcription upon elevation of cAMP levels results from translocation of PKA to the nucleus where it phosphorylates the transcription factor cAMP response element binding protein (CREB) on serine 133 which in turn leads to TFIIB binding to TATA-box-binding protein TBP1, thus linking phospho-CREB to the pol II transcription initiation complex.

Synonyms: PKA C-alpha

Product images:



Western blot (WB) analysis of PKAalpha/beta cat antibody in extracts from COLO cells.