Product name: Anti-PKA beta (catalytic subunit) antibody

Description: Rabbit polyclonal to PKA beta (catalytic subunit)

Host species: Rabbit

Tested applications: Suitable for: ICC/IF, IHC-P, WB

Species reactivity: Reacts with: Mouse, Rat, Human

Immunogen: Recombinant full length protein corresponding to Human PKA beta (catalytic subunit) aa 1-351.

Sequence:

MGNAATAKKGSEVESVKEFLAKAKEDFLKKWENPTQNNAGLEDFERKKTL
GTGSFGRVMLVKHKAETQYYAMKILDQKVVKLQIEH
TLNEKRLQAVNFPFLVRLYEAFKDNSNLMVMVEYVPGEFMFSHLRRIG
RFSEPHERFYAAQ
M/LTFEYLHSDLMLRYDLKPEADLIDHGQY1QVTDFGFAKR
VKGRTWTC
GTPEYLAPPEILSKGYNKADVWWGALVIYEMAAGYPP
FDADQPIQYVEK
IVSGKVRFPHIFSSDLKDQVRNLLQVDLTKRGFNLSNG
VSDIKTHKWAT
TDWIAVORKVEAPFIPKFRSGDTNSFDDYEEEEEDIRVS
ITEKCAKEFGEF

Database link: P22694

Positive control: SW480 cell extract.

Form: Liquid

Storage buffer
pH: 7.3
Preservative: 0.02% Sodium azide
Constituents: 49% PBS, 50% Glycerol

Purity
Immunogen affinity purified

Clonality
Polyclonal

Isotype
IgG

Applications
Our Abpromise guarantee covers the use of ab187515 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>1/50 - 1/200.</td>
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</tbody>
</table>

Target

Function
Mediates cAMP-dependent signaling triggered by receptor binding to GPCRs. PKA activation regulates diverse cellular processes such as cell proliferation, the cell cycle, differentiation and regulation of microtubule dynamics, chromatin condensation and decondensation, nuclear envelope disassembly and reassembly, as well as regulation of intracellular transport mechanisms and ion flux.

Tissue specificity
Isoform 1 is most abundant in the brain, with low level expression in kidney. Isoform 2 is predominantly expressed in thymus, spleen and kidney. Isoform 3 and isoform 4 are only expressed in the brain.

Sequence similarities
Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. cAMP subfamily. Contains 1 AGC-kinase C-terminal domain. Contains 1 protein kinase domain.

Post-translational modifications
Asn-3 is partially deaminated to Asp giving rise to 2 major isoelectric variants, called CB and CA respectively.

Cellular localization
Cytoplasm. Nucleus. Translocates into the nucleus (monomeric catalytic subunit) (By similarity). The inactive holoenzyme is found in the cytoplasm.

Images
Immunocytochemistry/Immunofluorescence analysis of U2OS cells using ab187515. Blue DAPI for nuclear staining.

Anti-PKA beta (catalytic subunit) antibody (ab187515) at 1/500 dilution + SW480 cell extract

**Predicted band size:** 41 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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