


Product datasheet

Anti-PKA alpha + beta (catalytic subunits) (phospho T197) antibody ab5815

[12 References](#) [1 Image](#)

Overview

Product name	Anti-PKA alpha + beta (catalytic subunits) (phospho T197) antibody
Description	Rabbit polyclonal to PKA alpha + beta (catalytic subunits) (phospho T197)
Host species	Rabbit
Specificity	This antibody exhibited a preference for PKA catalytic subunit beta in some tested cell lines.
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse Predicted to work with: Cow, Pig 
Immunogen	Synthetic peptide corresponding to PKA alpha + beta (catalytic subunits) (phospho T197).
Positive control	Forskolin-treated NIH3T3 cells, and Y-1 mouse adrenal cortical cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA
Purity	Immunogen affinity purified
Purification notes	The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated PKA. The final product is generated by affinity chromatography using a PKA-derived peptide that is

phosphorylated at threonine 197.

Clonality

Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab5815 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.1 - 0.75 µg/ml. Detects a band of approximately 42 kDa.

Target

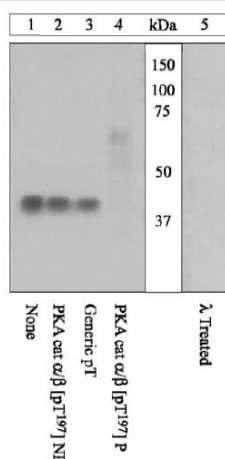
Relevance

PRKACA and PRKACB are members of the Ser/Thr protein kinase family and are a catalytic subunit of cAMP-dependent protein kinase. 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.

Cellular localization

Cytoplasm. Nucleus. Note=Translocates into the nucleus (monomeric catalytic subunit). The inactive holoenzyme is found in the cytoplasm

Images



Western blot - Anti-PKA alpha + beta (catalytic subunits) (phospho T197) antibody (ab5815)

Peptide Competition and Phosphatase Treatment: Lysates prepared from Y1 Adrenocortical cells were resolved by SDS-PAGE on a 10% polyacrylamide gel and transferred to PVDF. Membranes were either left untreated (1-4) or treated with lambda phosphatase (5), blocked with a 5% BSA-TBST buffer for two hours at room temperature, then incubated with 0.35 µg/mL ab5815 antibody for two hours at room temperature in a 3% BSA-TBST buffer, following prior incubation with: no peptide (1, 5), the non-phosphopeptide corresponding to the immunogen (2), a generic phosphothreonine containing peptide (3), or, the phosphopeptide immunogen (4). After washing, membranes were incubated with goat F(ab' 2 anti-rabbit IgG HRP conjugate and bands were detected using the Pierce SuperSignal™ method. The data show that the peptide corresponding to PKA [pT197] blocks the antibody signal, thereby demonstrating the specificity of the antibody. The data also show that phosphatase stripping eliminates the signal,

verifying that the antibody is phospho-specific.

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

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