Datasheet for ABIN7269663

# anti-PRKAR2B antibody

3 Images

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## Overview

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|---|---|
| Quantity: | 100 µL |
| Target: | PRKAR2B |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Monoclonal |
| Conjugate: | This PRKAR2B antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC) |

## Product Details

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|---|---|
| Purpose: | PRKAR2B Rabbit mAb |
| Immunogen: | A synthesized peptide derived from human PRKAR2B |
| Isotype: | IgG |
| Cross-Reactivity: | Human, Mouse, Rat |
| Characteristics: | Monoclonal Antibodies |
| Purification: | Affinity purification |

## Target Details

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|---|---|
| Target: | PRKAR2B |
| Alternative Name: | PRKAR2B (PRKAR2B Products) |
| Background: | CAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its |

## Target Details

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| | 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 one of the regulatory subunits. This subunit can be phosphorylated by the activated catalytic subunit. This subunit has been shown to interact with and suppress the transcriptional activity of the cAMP responsive element binding protein 1 (CREB1) in activated T cells. Knockout studies in mice suggest that this subunit may play an important role in regulating energy balance and adiposity. The studies also suggest that this subunit may mediate the gene induction and cataleptic behavior induced by haloperidol. [provided by RefSeq, Jul 2008],PRKAR2, RII-BETA,Apoptosis,Apoptosis_Inhibition of Apoptosis,Apoptosis_Mitochondrial Control of Apoptosis,Cell Biology & Developmental Biology,Cytoskeleton,Cytoskeleton_Actins,Endocrine & Metabolism,G protein signaling,G protein signaling_G-Protein-Coupled Receptors Signaling to MAPK/Erk,Insulin Receptor Signaling Pathway,Kinase,Lipid Metabolism,MAPK-Erk Signaling Pathway,Neurodegenerative Diseases,Neurodegenerative Diseases_Dopamine Signaling in Parkinsons Disease,Neuroscience,Signal Transduction,PRKAR2B |
| Molecular Weight: | 46kDa |
| Gene ID: | 5577 |
| UniProt: | P31323 |
| Pathways: | Hedgehog Signaling, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Myometrial Relaxation and Contraction, M Phase, G-protein mediated Events, Interaction of EGFR with phospholipase C-gamma, SARS-CoV-2 Protein Interactome, The Global Phosphorylation Landscape of SARS-CoV-2 Infection |

## Application Details

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| Application Notes: | WB,1:500 - 1:2000,IHC,1:50 - 1:200 |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Buffer: | PBS with 0.02 % sodium azide,0.05 % BSA,50 % glycerol, pH 7.3. |

## Handling

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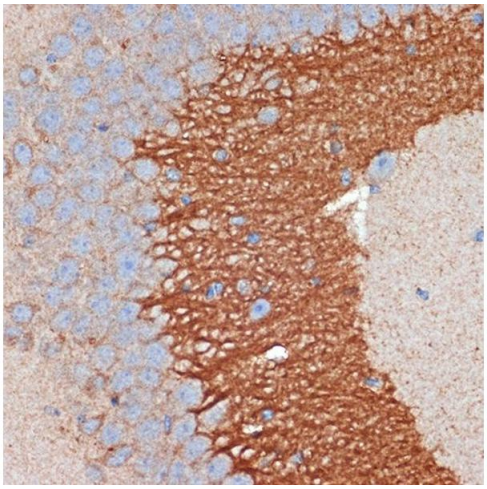
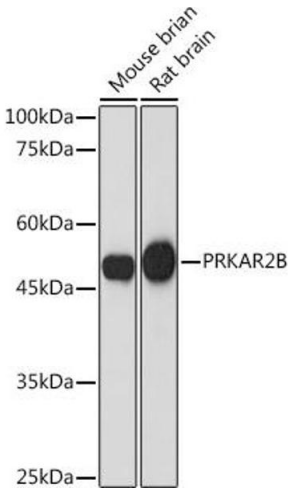
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | -20 °C |
| Storage Comment: | Store at -20°C. Avoid freeze / thaw cycles. |

## Images



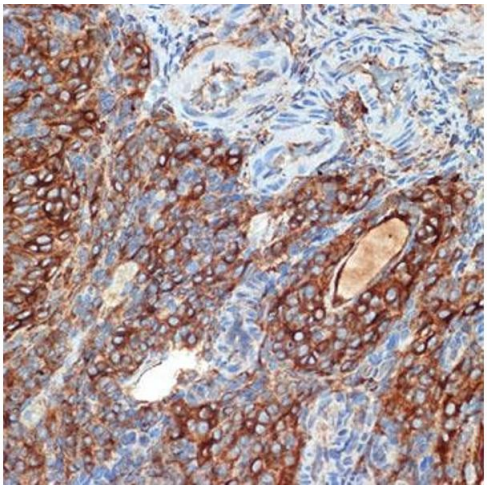
**Immunohistochemistry**

**Image 1.** Immunohistochemistry of paraffin-embedded mouse brain using PRKB Rabbit mAb (ABIN7269663) at dilution of 1:100 (40x lens).Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.




**Western Blotting**

**Image 2.** Western blot analysis of extracts of various cell lines, using PRKB Rabbit mAb (ABIN7269663) at 1:1000 dilution.Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution.Lysates/proteins: 25 µg per lane.Blocking buffer: 3 % nonfat dry milk in TBST.Detection: ECL Basic Kit (RM00020).Exposure time: 180s.



**Immunohistochemistry**

**Image 3.** Immunohistochemistry of paraffin-embedded rat ovary using PRKB Rabbit mAb (ABIN7269663) at dilution of 1:100 (40x lens).Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.