

# PDE1C Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP21818c

## Product Information

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|                   |                                 |
|-------------------|---------------------------------|
| Application       | WB, E                           |
| Primary Accession | <a href="#">Q14123</a>          |
| Reactivity        | Human, Rat, Mouse               |
| Predicted         | Bovine, Canine, Rabbit, Chicken |
| Host              | Rabbit                          |
| Clonality         | polyclonal                      |
| Isotype           | Rabbit IgG                      |
| Clone Names       | RB53462                         |
| Calculated MW     | 80760                           |

## Additional Information

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|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID            | 5137                                                                                                                                                                         |
| Other Names        | Calcium/calmodulin-dependent 3', 5'-cyclic nucleotide phosphodiesterase 1C, Cam-PDE 1C, hCam-3, PDE1C                                                                        |
| Target/Specificity | This PDE1C antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 375-409 amino acids from the Central region of human PDE1C.         |
| Dilution           | WB~~1:1000-2000 E~~Use at an assay dependent concentration.                                                                                                                  |
| Format             | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| Storage            | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.                                      |
| Precautions        | PDE1C Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.                                                                    |

## Protein Information

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| Name     | PDE1C ( <a href="#">HGNC:8776</a> )                                                                                                                                                                                                                                                                            |
| Function | Calmodulin-dependent cyclic nucleotide phosphodiesterase with a dual specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes (PubMed: <a href="#">29860631</a> , PubMed: <a href="#">8557689</a> ). Has a high affinity for both cAMP and cGMP |

(PubMed:[8557689](#)). Modulates the amplitude and duration of the cAMP signal in sensory cilia in response to odorant stimulation, hence contributing to the generation of action potentials. Regulates smooth muscle cell proliferation. Regulates the stability of growth factor receptors, including PDGFRB (Probable). In kidney juxtaglomerular granular cells, inhibits renin release by decreasing cAMP levels (By similarity).

#### Cellular Location

Lysosome {ECO:0000250 | UniProtKB:Q64338}.

#### Tissue Location

Isoform PDE1C2 is present in the heart and brain and, at lower levels in the lung, liver, kidney and skeletal muscle (PubMed:8557689). Isoform PDE1C1 is expressed in the heart and brain and, at lower levels in lung (PubMed:8557689). Also expressed at low levels in uterus and testis (PubMed:8557689)

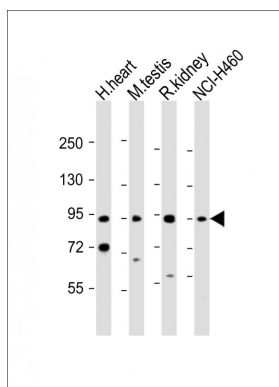
## Background

Cyclic nucleotide phosphodiesterase with a dual- specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes. Has a high affinity for both cAMP and cGMP.

## References

Loughney K.,et al.J. Biol. Chem. 271:796-806(1996).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Hillier L.W.,et al.Nature 424:157-164(2003).  
Oppermann F.S.,et al.Mol. Cell. Proteomics 8:1751-1764(2009).

## Images



All lanes : Anti-PDE1C Antibody (Center) at 1:1000-2000 dilution Lane 1: human heart lysate Lane 2: mouse testis lysate Lane 3: rat kidney lysate Lane 4: NCI-H460 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 81 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.