

PDE1C (N-17): sc-54937

BACKGROUND

Phosphodiesterases (PDEs, also designated cyclic nucleotide phosphodiesterase) are important for the downregulation of intracellular levels of the second messengers cyclic adenosine monophosphate (cAMP) and cyclic guanosine monophosphate (cGMP). The PDE1 family are calmodulin-dependent (CaM-PDE) proteins that undergo stimulation through a calcium-calmodulin complex and function to hydrolyze cAMP to 5'AMP and cGMP to 5'GMP. PDE1C (phosphodiesterase 1C), also known as HCAM3, is a widely expressed protein that has a high affinity for both cAMP and cGMP. Two isoforms, designated PDE1C1 and PDE1C2, exist due to alternative splicing at the C-terminus. While both isoforms are expressed in low levels throughout the body, PDE1C2 is expressed predominately in the brain and heart, while PDE1C1 is expressed predominately in the brain, heart and lung.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PDE1C (human) mapping to 7p14.3; Pde1c (mouse) mapping to 6 B3.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

SOURCE

PDE1C (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of PDE1C of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54937 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PDE1C (N-17) is recommended for detection of PDE1C of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

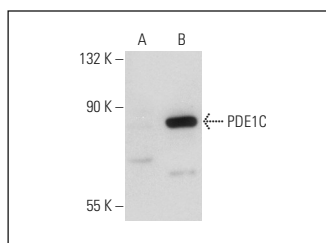
PDE1C (N-17) is also recommended for detection of PDE1C in additional species, including equine and avian.

Suitable for use as control antibody for PDE1C siRNA (h): sc-62765, PDE1C siRNA (m): sc-62766, PDE1C shRNA Plasmid (h): sc-62765-SH, PDE1C shRNA Plasmid (m): sc-62766-SH, PDE1C shRNA (h) Lentiviral Particles: sc-62765-V and PDE1C shRNA (m) Lentiviral Particles: sc-62766-V.

Molecular Weight of PDE1C: 81 kDa.

Positive Controls: PDE1C (h3): 293 Lysate: sc-158826 or WI-38 whole cell lysate: sc-364260.

DATA



PDE1C (N-17): sc-54937. Western blot analysis of PDE1C expression in non-transfected: sc-110760 (A) and human PDE1C transfected: sc-158826 (B) 293 whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.