SANTA CRUZ BIOTECHNOLOGY, INC.

PDE6D (N-15): sc-50260

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Phosphodiesterases (PDEs), also designated cyclic nucleotide phosphodiesterases, are important for the downregulation of the intracellular level of the second messenger cyclic adenosine monophosphate (cAMP) by hydrolyzing cAMP to 5'AMP. The PDE family contains proteins that serve tissue-specific roles in the regulation of lipolysis, glycogenolysis, myocardial contractility and smooth muscle relaxation. PDE6D, also designated phosphodiesterase 6D cGMP-specific rod δ, is a retina-specific oligomer composed of two catalytic chains (α and β), an inhibitory chain (γ) and the δ chain. It interacts with RPGR, ARL2 and ARL3, and contains 150 amino acids, which are unusually well conserved, with only a few conservative substitutions in human, cow, mouse and rat PDE6D. The PDE6D protein contains two N-linked glycosylation sites.

CHROMOSOMAL LOCATION

Genetic locus: PDE6D (human) mapping to 2q37.1; Pde6d (mouse) mapping to 1 D.

SOURCE

PDE6D (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of PDE6D 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-50260 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

PDE6D (N-15) is recommended for detection of PDE6D of mouse, rat 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).

PDE6D (N-15) is also recommended for detection of PDE6D in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for PDE6D siRNA (h): sc-61309, PDE6D siRNA (m): sc-61310, PDE6D shRNA Plasmid (h): sc-61309-SH, PDE6D shRNA Plasmid (m): sc-61310-SH, PDE6D shRNA (h) Lentiviral Particles: sc-61309-V and PDE6D shRNA (m) Lentiviral Particles: sc-61310-V.

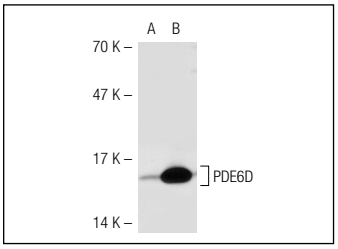
Molecular Weight of PDE6D: 17 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or PDE6D (m): 293T Lysate: sc-122458.

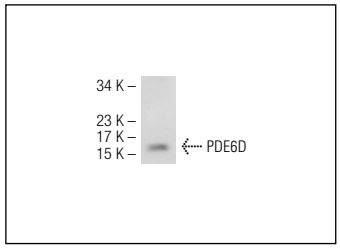
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PDE6D (N-15): sc-50260. Western blot analysis of PDE6D expression in non-transfected: sc-117752 (**A**) and mouse PDE6D transfected: sc-122458 (**B**) 293T whole cell lysates.



PDE6D (N-15): sc-50260. Western blot analysis of PDE6D expression in HeLa whole cell lysate.

RESEARCH USE

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

PROTOCOLS

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