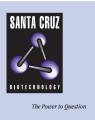
# SANTA CRUZ BIOTECHNOLOGY, INC.

# PDE6G/H (C-12): sc-50263



BACKGROUND

Phosphodiesterases (PDEs, also designated cyclic nucleotide phosphodesterases) are important for the downregulation of the intracellular level of the second messenger cyclic adenosine monophosphate (cAMP), as they are responsible for hydrolyzing cAMP to 5'AMP. PDE6G, also designated phophodiesterase 6G cGMP-specific rod  $\gamma$ , is an oligomer composed of two catalytic chains ( $\alpha$  and  $\beta$ ), an inhibitory chain ( $\gamma$ ) and an  $\delta$  chain. PDE6G functions in the processes of transmission and amplification of the visual signal. A mutation in the rod PDE- $\gamma$  gene desensitizes and delays murine rod photoreceptors. PDE6H, also designated phosphodiesterase 6H cGMP-specific cone  $\gamma$ , is a tetramer composed of two catalytic chains ( $\alpha$  and  $\beta$ ) and two inhibitory chains ( $\gamma$ ). It functions similarly to PDE6H in vision processes. Defects of the PDE6H gene cause retinal cone dystrophy 3 (rcd3), also designated cone dystrophy with night blindness and supernormal rod responses.

#### REFERENCES

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- 8. Piri, N., Gao, Y.Q., Danciger, M., Mendoza, E., Fishman, G.A. and Farber, D.B. 2005. A substitution of G to C in the cone cGMP-phosphodiesterase  $\gamma$  subunit gene found in a distinctive form of cone dystrophy. Ophthalmology 112: 159-166.

## CHROMOSOMAL LOCATION

Genetic locus: PDE6G (human) mapping to 17q25; Pde6g (mouse) mapping to 11 E2.

## **RESEARCH USE**

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

# SOURCE

PDE6G/H (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of PDE6G of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50263 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

PDE6G/H (C-12) is recommended for detection of PDE6G and PDE6H of mouse, rat and human origin byWestern Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for PDE6G/H siRNA (h): sc-61311 and PDE6G/H siRNA (m): sc-61312.

Molecular Weight of PDE6G/H: 9-9.5 kDa.

## **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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **STORAGE**

Store at 4° C, \*\*D0 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.