

PDE6H (G-2): sc-398478

BACKGROUND

Encoding over 1,100 genes within 132 million bases, chromosome 12 makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12 including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Noonan syndrome, which includes heart and facial developmental defects among the primary symptoms, is caused by a mutant form of PTPN11 gene product, SH-PTP2. Chromosome 12 is also home to a homeobox gene cluster which encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster encoding C-type lectin proteins which mediate the NK cell response to MHC class I interaction. Trisomy 12p leads to facial development defects, seizure disorders and a host of other symptoms varying in severity depending on the extent of mosaicism, and is most severe in cases of complete trisomy.

REFERENCES

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- Yang, W. and Cole, W.G. 1998. Low basal transcripts of the COL2A1 collagen gene from lymphoblasts show alternative splicing of exon 12 in the Kniest form of spondyloepiphyseal dysplasia. *Hum. Mutat.* 1: S1-S2.
- Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
- Zumkeller, W., et al. 2004. Genotype/phenotype analysis in a patient with pure and complete trisomy 12p. *Am. J. Med. Genet. A* 129A: 261-264.
- Kelley, J., et al. 2005. Comparative genomics of natural killer cell receptor gene clusters. *PLoS Genet.* 1: 129-139.
- Nishimura, G., et al. 2005. The phenotypic spectrum of COL2A1 mutations. *Hum. Mutat.* 26: 36-43.

CHROMOSOMAL LOCATION

Genetic locus: PDE6H (human) mapping to 12p12.3; Pde6h (mouse) mapping to 6 G1.

SOURCE

PDE6H (G-2) is a mouse monoclonal antibody raised against amino acids 14-83 representing full length PDE6H of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PDE6H (G-2) is available conjugated to agarose (sc-398478 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398478 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398478 PE), fluorescein (sc-398478 FITC), Alexa Fluor[®] 488 (sc-398478 AF488), Alexa Fluor[®] 546 (sc-398478 AF546), Alexa Fluor[®] 594 (sc-398478 AF594) or Alexa Fluor[®] 647 (sc-398478 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-398478 AF680) or Alexa Fluor[®] 790 (sc-398478 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

PDE6H (G-2) is recommended for detection of PDE6H of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

PDE6H (G-2) is also recommended for detection of PDE6H in additional species, including equine, canine, bovine, porcine and avian.

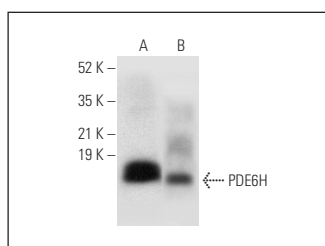
Suitable for use as control antibody for PDE6G siRNA (h): sc-61311, PDE6G siRNA (m): sc-61312, PDE6G shRNA Plasmid (h): sc-61311-SH, PDE6G shRNA Plasmid (m): sc-61312-SH, PDE6G shRNA (h) Lentiviral Particles: sc-61311-V and PDE6G shRNA (m) Lentiviral Particles: sc-61312-V.

Positive Controls: human eye extract: sc-364223 or mouse eye extract: sc-364241.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



PDE6H (G-2): sc-398478. Western blot analysis of PDE6H expression in human eye (A) and mouse eye (B) tissue extracts.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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