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SANTA CRUZ BIOTECHNOLOGY, INC.

PHKG2 (h2): 293T Lysate: sc-172934

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

PHKG2 (phosphorylase kinase subunit γ2), also known as PHK γ testis/liver isoform (PHK-γ-T) or PSK-C3, is a subunit of phosphorylase kinase (PHK). PHK is a hexadecameric protein composed of four α chains, four β chains, four γ chains and four δ chains. The γ chains are catalytic chains, the α and β chains are regulatory chains and the δ chains are calmodulins. PHKG2 is an isozyme of the γ chain and is expressed in testis, liver and possibly other non-muscle tissues. It contains one protein kinase domain and belongs to the Ser/Thr protein kinase family. As the catalytic chain of PHK, PHKG2 is responsible for catalyzing the phosphorylation and activation of glycogen phosphorylase and therefore it plays an important role in the glycogenolytic pathway. Mutations in the gene encoding PHKG2 can lead to PHK deficiency and result in glycogen storage disease type 9C (GSD9C), also known as autosomal liver glycogenosis.

REFERENCES

1. Hanks, S.K. 1989. Messenger ribonucleic acid encoding an apparent isoform of phosphorylase kinase catalytic subunit is abundant in the adult testis. Mol. Endocrinol. 3: 110-116.
2. Calalb, M.B., et al. 1992. Molecular cloning and enzymatic analysis of the rat homolog of "PhK-γ T," an isoform of phosphorylase kinase catalytic subunit. J. Biol. Chem. 267: 1455-1463.
3. Liu, L., et al. 1996. The testis isoform of the phosphorylase kinase catalytic subunit (PhK-γT) plays a critical role in regulation of glycogen mobilization in developing lung. J. Biol. Chem. 271: 11761-11766.
4. Maichele, A.J., et al. 1996. Mutations in the testis/liver isoform of the phosphorylase kinase γ subunit (PHKG2) cause autosomal liver glycogenosis in the gsd rat and in humans. Nat. Genet. 14: 337-340.
5. Burwinkel, B., et al. 1998. Liver glycogenosis due to phosphorylase kinase deficiency: PHKG2 gene structure and mutations associated with cirrhosis. Hum. Mol. Genet. 7: 149-154.
6. Burwinkel, B., et al. 2000. Phosphorylase kinase deficient liver glycogenosis: progression to cirrhosis in infancy associated with PHKG2 mutations (H144Y and L225R) J. Med. Genet. 37: 376-377.
7. Burwinkel, B., et al. 2003. Severe phenotype of phosphorylase kinase-deficient liver glycogenosis with mutations in the PHKG2 gene. Pediatr. Res. 54: 834-839.
8. Chen, C.S., et al. 2006. Effects of *Scutellariae radix* on gene expression in HEK 293 cells using cDNA microarray. J. Ethnopharmacol. 105: 346-351.
9. Beauchamp, N.J., et al. 2007. Glycogen storage disease type IX: high variability in clinical phenotype. Mol. Genet. Metab. 92: 88-99.

CHROMOSOMAL LOCATION

Genetic locus: PHKG2 (human) mapping to 16p11.2.

PRODUCT

PHKG2 (h2): 293T Lysate represents a lysate of human PHKG2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PHKG2 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive PHKG2 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.