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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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SANTA CRUZ BIOTECHNOLOGY, INC.

ADPGK (h): 293T Lysate: sc-176797

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ADPGK (ADP-dependent glucokinase), also known as ADP-GK or RbBP-35, is a member of the ADP-dependent glucokinase family of proteins that are involved in both carbohydrate degradation and glycolysis. Expressed in a wide variety of tissues including lymphatic, endocrine, muscular and epithelial, ADPGK functions to catalyze the ADP-dependent phosphorylation of D-glucose to D-glucose 6-phosphate. Although GDP and CDP can replace ADP as a phosphate donor, the enzymatic efficiency of ADPGK is decreased when anything other than ADP is used. ADPGK contains one ADPK (ADP-dependent kinase) domain and is able to bind one magnesium ion as a cofactor. Five isoforms of ADPGK exist due to alternative splicing events.

REFERENCES

1. Tsuge, H., et al. 2002. Crystal structure of the ADP-dependent glucokinase from *Pyrococcus horikoshii* at 2.0-A resolution: a large conformational change in ADP-dependent glucokinase. Protein Sci. 11: 2456-2463.
2. Sakuraba, H., et al. 2002. ADP-dependent glucokinase/phosphofructokinase, a novel bifunctional enzyme from the hyperthermophilic archaeon *Methanococcus jannaschii*. J. Biol. Chem. 277: 12495-12498.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611861. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Ronimus, R.S. and Morgan, H.W. 2004. Cloning and biochemical characterization of a novel mouse ADP-dependent glucokinase. Biochem. Biophys. Res. Commun. 315: 652-658.
5. Gregori, C., et al. 2006. Insulin regulation of glucokinase gene expression: evidence against a role for sterol regulatory element binding protein 1 in primary hepatocytes. FEBS Lett. 580: 410-414.

CHROMOSOMAL LOCATION

Genetic locus: ADPGK (human) mapping to 15q24.1.

PRODUCT

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

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.

APPLICATIONS

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

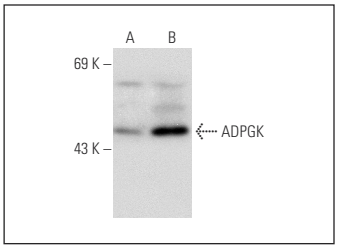
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ADPGK (AA40): sc-100751 is recommended as a positive control antibody for Western Blot analysis of enhanced human ADPGK expression in ADPGK transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



ADPGK (AA40): sc-100751. Western blot analysis of ADPGK expression in non-transfected: sc-117752 (**A**) and human ADPGK transfected: sc-176797 (**B**) 293T whole cell lysates.

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.