



Akt3 (h): 293T Lysate: sc-127954

BACKGROUND

The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 (also designated PKB β or RacPK- β) and Akt3 (also designated PKB γ or thymoma viral proto-oncogene 3), which exhibit sequence homology with the protein kinase A and C families and are encoded by the c-Akt proto-oncogene. All members of the Akt family have a Pleckstrin homology domain. Akt3 is phosphorylated on a serine residue in response to Insulin. However, the activation of Akt3 by Insulin is inhibited by prior activation of protein kinase C via a mechanism that does not require the presence of the PH domain. Akt3 is expressed in 3T3-L1 fibroblasts, adipocytes and skeletal muscle and may be involved in various biological processes, including adipocyte and muscle differentiation, glycogen synthesis, glucose uptake, apoptosis and cellular proliferation.

REFERENCES

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4. Cheng, J.Q., et al. 1996. Amplification of Akt2 in human pancreatic cancer cells and inhibition of Akt2 expression and tumorigenicity by antisense RNA. *Proc. Natl. Acad. Sci. USA* 93: 3636-3641.
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7. Turinsky, J., et al. 1999. Akt kinases and 2-deoxyglucose uptake in rat skeletal muscles *in vivo*: study with Insulin and exercise. *Am. J. Physiol.* 276: R277-R282.
8. Murthy, S.S., et al. 2000. Mapping of AKT3, encoding a member of the Akt/protein kinase B family, to human and rodent chromosomes by fluorescence *in situ* hybridization. *Cytogenet. Cell Genet.* 88: 38-40.

CHROMOSOMAL LOCATION

Genetic locus: AKT3 (human) mapping to 1q43.

PRODUCT

Akt3 (h): 293T Lysate represents a lysate of human Akt3 transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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

Akt3 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Akt3 antibodies. Recommended use: 10-20 μ l per lane.

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

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.