SANTA CRUZ BIOTECHNOLOGY, INC.

GK1 (h): 293T Lysate: sc-114906

BACKGROUND

As the central structural component of the major classes of biological lipids, trigylcerides and phosphatidyl phospholipids, glycerol is an essential intermediate in carbohydrate and lipid metabolism. Glycerol kinases (GKs) function to catalyze the transfer of a phosphate group from ATP to glycerol, thereby forming glycerol phosphate. This intermediate can then be converted to dihydroxyacetone phosphate (DHAP), which is utilized in either glycolysis or gluconeogenesis. Mutations in the genes encoding GK family members can result in glycerol kinase deficiency, which is characterized by hyperglycerolemia, psycomotor retardation and osteoporosis. GK1 is a 559 amino acid mitochondrial peripheral membrane protein that belongs to the FGGY kinase family and is a key enzyme involved in the regulation of glycerol uptake and metabolism. GK1 shows high expression in kidney, testis and liver and exists as three isoforms, which are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GK (human) mapping to Xp21.2.

PRODUCT

GK1 (h): 293T Lysate represents a lysate of human GK1 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

GK1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive GK1 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.

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.