

DAK (m): 293T Lysate: sc-119655

BACKGROUND

DAK (dihydroxyacetone kinase 2 homolog), also known as NET45, bifunctional ATP-dependent dihydroxyacetone kinase/FAD-AMP lyase (cyclizing), DHA kinase (ATP-dependent dihydroxyacetone kinase), glycerone kinase, FAD-AMP lyase (cyclic FMN forming) or FMN cyclase, is a 575 amino acid protein belonging to the dihydroxyacetone kinase (DAK) family. Existing as a homodimer, DAK catalyzes the formation of FAD to cyclin FMN, as well as the phosphorylation of dihydroxyacetone and splitting of ribonucleoside diphosphate-X compounds. DAK contains one DhaK domain, a DhaL domain, and is encoded by a gene located on human chromosome 11. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

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5. Bhuiyan, Z.A., Momenah, T.S., Amin, A.S., Al-Khadra, A.S., Alders, M., Wilde, A.A. and Mannens, M.M. 2008. An intronic mutation leading to incomplete skipping of exon-2 in KCNQ1 rescues hearing in Jervell and Lange-Nielsen syndrome. *Prog. Biophys. Mol. Biol.* 98: 319-327.
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CHROMOSOMAL LOCATION

Genetic locus: DAK (mouse) mapping to 19 A.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

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

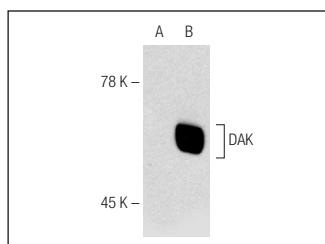
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

DAK (G-5): sc-365984 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse DAK expression in DAK transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

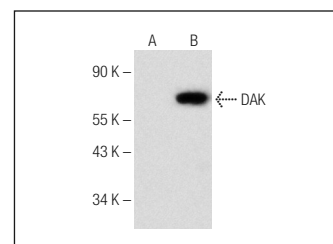
RECOMMENDED SUPPORT REAGENTS

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



DAK (G-5): sc-365984. Western blot analysis of DAK expression in non-transfected: sc-117752 (A) and mouse DAK transfected: sc-119655 (B) 293T whole cell lysates.



DAK (A-5): sc-365458. Western blot analysis of DAK expression in non-transfected: sc-117752 (A) and mouse DAK transfected: sc-119655 (B) 293T whole cell lysates.

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.

PROTOCOLS

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