



GlcNAc kinase (m): 293T Lysate: sc-120498

BACKGROUND

GlcNAc kinase, also known as GNK or NAGK (N-acetylglucosamine kinase), is a 344 amino acid homodimeric protein that is ubiquitously expressed. Belonging to the sugar kinase/HSP 70/Actin superfamily and the eukaryotic-type N-acetylglucosamine kinase family, GlcNAc kinase converts endogenous N-acetylglucosamine (GlcNAc), a major component of complex carbohydrates, from lysosomal degradation or nutritional sources into GlcNAc 6-phosphate. GlcNAc kinase is considered a salvage enzyme of amino sugar metabolism in mammals and predominately produces the β anomer of phosphorylated sugars. It is suggested that GlcNAc kinase has ManNAc kinase activity.

REFERENCES

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6. Perez-Arellano, I., et al. 2006. Mapping active site residues in glutamate-5-kinase. The substrate glutamate and the feed-back inhibitor proline bind at overlapping sites. FEBS Lett. 580: 6247-6253.
7. Yang, C., et al. 2006. Comparative genomics and experimental characterization of N-acetylglucosamine utilization pathway of *Shewanella oneidensis*. J. Biol. Chem. 281: 29872-29885.
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CHROMOSOMAL LOCATION

Genetic locus: Nagk (mouse) mapping to 6 C3.

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.

PRODUCT

GlcNAc kinase (m): 293T Lysate represents a lysate of mouse GlcNAc kinase transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

GlcNAc kinase (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GlcNAc kinase 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.

PROTOCOLS

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