

GLIS1 (m): 293T Lysate: sc-125388

BACKGROUND

GLIS1 is a 789 amino acid protein encoded by the human gene GLIS1. Located in the nucleus, GLIS1 acts as both a repressor and activator of transcription. GLIS1 belongs to the GLI C₂H₂-type zinc finger protein family and contains five C₂H₂-type zinc fingers. GLIS1 is expressed in a temporal and spatial manner during development, with expression being most prominent in several defined structures of mesodermal lineage. These include craniofacial regions, branchial arches, somites, vibrissal and hair follicles, limb buds and myotomes. GLIS1 is a novel Krüppel-like protein that binds to the consensus sequence 5'-GACCACCCAC-3'. The Krüppel gene family is characterized by a consensus C₂H₂ zinc finger domain and is believed to function as a transcription activator in the vertebrate sonic hedgehog (Shh)-patched signal transduction pathway. Understanding GLI gene regulation may be of importance to understanding causes of human birth defects and cancer.

REFERENCES

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- Kim, Y.S., et al. 2002. Identification of GLIS1, a novel GLI-related, Krüppel-like zinc finger protein containing transactivation and repressor functions. *J. Biol. Chem.* 277: 30901-30913.
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- Kim, Y.S., et al. 2003. GLIS3, a novel member of the GLIS subfamily of Krüppel-like zinc finger proteins with repressor and activation functions. *Nucleic Acids Res.* 31: 5513-5525.
- Nakanishi, G., et al. 2006. Regulatory role for Krüppel-like zinc-finger protein GLI-similar 1 (GLIS1) in PMA-treated and psoriatic epidermis. *J. Invest. Dermatol.* 126: 49-60.

CHROMOSOMAL LOCATION

Genetic locus: Glis1 (mouse) mapping to 4 C7.

PRODUCT

GLIS1 (m): 293T Lysate represents a lysate of mouse GLIS1 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

GLIS1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GLIS1 antibodies. Recommended use: 10-20 µl per lane.

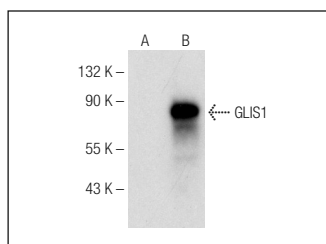
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GLIS1 (A-6): sc-365453 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse GLIS1 expression in GLIS1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

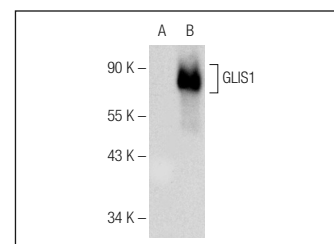
RECOMMENDED SUPPORT REAGENTS

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



GLIS1 (A-6): sc-365453. Western blot analysis of GLIS1 expression in non-transfected: sc-117752 (A) and mouse GLIS1 transfected: sc-125388 (B) 293T whole cell lysates.



GLIS1 (A-3): sc-373755. Western blot analysis of GLIS1 expression in non-transfected: sc-117752 (A) and mouse GLIS1 transfected: sc-125388 (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.