

gankyrin (m): 293T Lysate: sc-120400

BACKGROUND

Gankyrin, a hepatocellular carcinoma-associated protein, regulates protein-protein interactions in cell cycle control as well as protein degradation. Furthermore, upregulation of gankyrin correlates with cell-cycle progression in normal hepatocytes as well. It contains six domains known as Ankyrin repeats, and interacts with Rb, Cdk4, the 26S proteasome and MAGE-A4. This last interaction suppresses anchorage-independent growth in gankyrin overexpressing cells, demonstrating a possible mechanism for immunotherapy in hepatocellular carcinoma.

REFERENCES

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2. Nagao, T., Higashitsuji, H., Nonoguchi, K., Sakurai, T., Dawson, S., Mayer, R.J., Itoh, K. and Fujita, J. 2003. MAGE-A4 interacts with the liver oncoprotein gankyrin and suppresses its tumorigenic activity. *J. Biol. Chem.* 278: 10668-10674.
3. Krzywdka, S., Brzozowski, A.M., Higashitsuji, H., Fujita, J., Welchman, R., Dawson, S., Mayer, R.J. and Wilkinson, A.J. 2004. The crystal structure of gankyrin, an oncoprotein found in complexes with cyclin-dependent kinase 4, a 19S proteasomal ATPase regulator, and the tumor suppressors Rb and p53. *J. Biol. Chem.* 279: 1541-1545.
4. Higashitsuji, H., Higashitsuji, H., Itoh, K., Sakurai, T., Nagao, T., Sumitomo, Y., Sumitomo, H., Masuda, T., Dawson, S., Shimada, Y., Mayer, R.J. and Fujita, J. 2005. The oncoprotein gankyrin binds to MDM2/HDM2, enhancing ubiquitylation and degradation of p53. *Cancer Cell* 8: 75-87.

CHROMOSOMAL LOCATION

Genetic locus: Psm10 (mouse) mapping to X F1.

PRODUCT

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

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

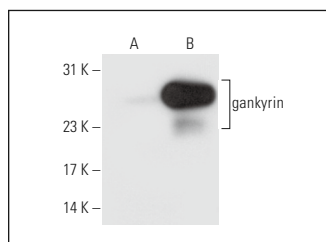
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

gankyrin (G-2): sc-166213 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse gankyrin expression in gankyrin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

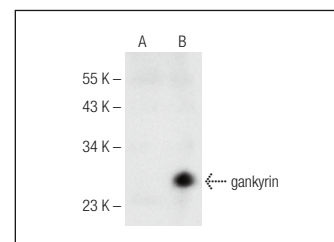
RECOMMENDED SUPPORT REAGENTS

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



gankyrin (G-2): sc-166213. Western blot analysis of gankyrin expression in non-transfected: sc-117752 (A) and mouse gankyrin transfected: sc-120400 (B) 293T whole cell lysates.



gankyrin (D-11): sc-373735. Western blot analysis of gankyrin expression in non-transfected: sc-117752 (A) and mouse gankyrin transfected: sc-120400 (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.