SANTA CRUZ BIOTECHNOLOGY, INC.

gankyrin (H-231): sc-8991



BACKGROUND

Gankyrin, a hepatocellular carcinoma-associated protein, regulates proteinprotein 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.

CHROMOSOMAL LOCATION

Genetic locus: PSMD10 (human) mapping to Xq22.3; Psmd10 (mouse) mapping to X F1.

SOURCE

gankyrin (H-231) is a rabbit polyclonal antibody raised against amino acids 1-231 representing full length gankyrin of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

gankyrin (H-231) is recommended for detection of gankyrin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

gankyrin (H-231) is also recommended for detection of gankyrin in additional species, including equine, canine and porcine.

Suitable for use as control antibody for gankyrin siRNA (h): sc-72186, gankyrin siRNA (m): sc-72187, gankyrin shRNA Plasmid (h): sc-72186-SH, gankyrin shRNA Plasmid (m): sc-72187-SH, gankyrin shRNA (h) Lentiviral Particles: sc-72186-V and gankyrin shRNA (m) Lentiviral Particles: sc-72187-V.

Molecular Weight of gankyrin: 28 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, gankyrin (m): 293T Lysate: sc-120400 or JAR cell lysate: sc-2276.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

RESEARCH USE

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

DATA





gankyrin (H-231): sc-8991. Western blot analysis of gankyrin expression in non-transfected 293T: sc-11752 (A), mouse gankyrin transfected 293T: sc-120400 (**B**) and HeLa (**C**) whole cell lysates. gankyrin (H-231): sc-8991. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human urinary bladder tissue showing nuclear and cytoplasmic staining of surface epthelial cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

- Chen, Y., et al. 2007. Oncoprotein p28 GANK binds to ReIA and retains NFκB in the cytoplasm through nuclear export. Cell Res. 17: 1020-1029.
- Nitta, R.T., et al. 2007. Evidence that proteasome-dependent degradation of the retinoblastoma protein in cells lacking A-type lamins occurs independently of gankyrin and MDM2. PLoS ONE 2: e963.
- Torre-Villalvazo, I., et al. 2008. Soy protein ameliorates metabolic abnormalities in liver and adipose tissue of rats fed a high fat diet. J. Nutr. 138: 462-468.
- Qiu, W., et al. 2008. Retinoblastoma protein modulates gankyrin-MDM2 in regulation of p53 stability and chemosensitivity in cancer cells. Oncogene 27: 4034-4043.
- Chen, X., et al. 2009. The overexpression of multidrug resistance-associated proteins and gankyrin contribute to arsenic trioxide resistance in liver and gastric cancer cells. Oncol. Rep. 22: 73-80.
- Man, J.H., et al. 2010. Gankyrin plays an essential role in Ras-induced tumorigenesis through regulation of the RhoA/ROCK pathway in mammalian cells. J. Clin. Invest. 120: 2829-2841.
- 7. Zhen, C., et al. 2012. Gankyrin promotes breast cancer cell metastasis by regulating Rac1 activity. Oncogene. E-published.

MONOS Satisfation Guaranteed

Try gankyrin (3A6C2): sc-101498 or gankyrin (A-8): sc-166376, our highly recommended monoclonal alternatives to gankyrin (H-231).