## 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 $\mathrm{Rb}, \mathrm{Cdk4}$, 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

1. Iwai, A., et al. 2003. Role of a novel oncogenic protein, gankyrin, in hepatocyte proliferation. J. Gastroenterol. 38: 751-758.
2. Nagao, T., et al. 2003. MAGE-A4 interacts with the liver oncoprotein gankyrin and suppresses its tumorigenic activity. J. Biol. Chem. 278: 10668-10674.

## CHROMOSOMAL LOCATION

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

## SOURCE

gankyrin ( $\mathrm{N}-13$ ) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N -terminus of gankyrin of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{glgG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-28479 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA}$ ).

## APPLICATIONS

gankyrin ( $\mathrm{N}-13$ ) 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 $[1-2 \mu \mathrm{~g}$ per 100-500 $\mu \mathrm{g}$ of total protein ( 1 ml of cell lysate)], immunofluorescence (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 ( $\mathrm{N}-13$ ) is also recommended for detection of gankyrin in additional species, including equine, canine, bovine 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: 25 kDa .
Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or gankyrin (m): 293T Lysate: sc-120400.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 ( 0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## DATA


gankyrin (N-13): sc-28479. Western blot analysis of gankyrin expression in non-transfected: sc-117752 (A) and mouse gankyrin transfected: sc-120400 (B) 293T whole cell lysates.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## PROTOCOLS

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

Try gankyrin (3A6C2): sc-101498 or gankyrin (A-8):
sc-166376, our highly recommended monoclonal alternatives to gankyrin ( $\mathrm{N}-13$ ).

