

# GIPC2 (V-14): sc-68538

## BACKGROUND

The eukaryotic PDZ domain is a multifunctional protein-protein interacting motif that is found in a variety of proteins and is involved in both the clustering of signaling molecules and the organization of protein networks. GIPC2 (GIPC PDZ domain containing family, member 2), also known as SEMCAP2, is a 315 amino acid protein that localizes to the cytoplasm and contains one PDZ domain. Expressed at high levels in kidney and colon and at lower levels in adult liver, GIPC2 interacts with SEMA5A and is thought to function as a scaffold protein, possibly modulating cell adhesion and growth factor signaling and playing a role in tumorigenesis. The gene encoding GIPC2 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

## REFERENCES

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2. Katoh, M. 2002. GIPC gene family (Review). *Int. J. Mol. Med.* 9: 585-589.
3. Kirikoshi, H. and Katoh, M. 2002. Molecular cloning and characterization of human GIPC2, a novel gene homologous to human GIPC1 and *Xenopus* Kermit. *Int. J. Oncol.* 20: 571-576.
4. Kirikoshi, H. and Katoh, M. 2002. Upregulation of GIPC2 in human gastric cancer. *Int. J. Oncol.* 20: 1183-1187.
5. Kirikoshi, H. and Katoh, M. 2002. Expression of WNT7A in human normal tissues and cancer, and regulation of WNT7A and WNT7B in human cancer. *Int. J. Oncol.* 21: 895-900.
6. Katoh, M. 2007. Networking of WNT, FGF, Notch, BMP, and Hedgehog signaling pathways during carcinogenesis. *Stem Cell Rev.* 3: 30-38.
7. Kuang, S.Q., Tong, W.G., Yang, H., Lin, W., Lee, M.K., Fang, Z.H., Wei, Y., Jelinek, J., Issa, J.P. and Garcia-Manero, G. 2008. Genome-wide identification of aberrantly methylated promoter associated CpG islands in acute lymphocytic leukemia. *Leukemia* 22: 1529-1538.

## CHROMOSOMAL LOCATION

Genetic locus: GIPC2 (human) mapping to 1p31.1; Gipc2 (mouse) mapping to 3 H3.

## SOURCE

GIPC2 (V-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GIPC2 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-68538 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

GIPC2 (V-14) is recommended for detection of GIPC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

GIPC2 (V-14) is also recommended for detection of GIPC2 in additional species, including equine.

Suitable for use as control antibody for GIPC2 siRNA (h): sc-75132, GIPC2 siRNA (m): sc-75133, GIPC2 shRNA Plasmid (h): sc-75132-SH, GIPC2 shRNA Plasmid (m): sc-75133-SH, GIPC2 shRNA (h) Lentiviral Particles: sc-75132-V and GIPC2 shRNA (m) Lentiviral Particles: sc-75133-V.

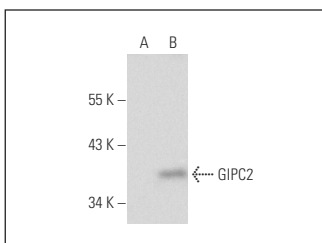
Molecular Weight of GIPC2: 34 kDa.

Positive Controls: GIPC2 (m): 293T Lysate: sc-120490 or Jurkat whole cell lysate: sc-2204.

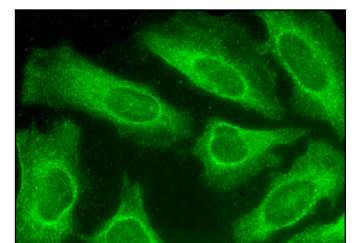
## RECOMMENDED SECONDARY REAGENTS

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™ Mounting Medium: sc-24941.

## DATA



GIPC2 (V-14): sc-68538. Western blot analysis of GIPC2 expression in non-transfected: sc-117752 (A) and mouse GIPC2 transfected: sc-120490 (B) 293T whole cell lysates.



GIPC2 (V-14): sc-68538. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

## STORAGE

Store at 4° C, \*\*DO 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](http://www.scbt.com) or our catalog for detailed protocols and support products.