

GIPC2 (P-22): sc-133622

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

1. Kirikoshi, H. and Katoh, M. 2002. Expression of human GIPC1 in normal tissues, cancer cell lines, and primary tumors. *Int. J. Mol. Med.* 9: 509-513.
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. Expression of WNT7A in human normal tissues and cancer, and regulation of WNT7A and WNT7B in human cancer. *Int. J. Oncol.* 21: 895-900.
5. Kirikoshi, H. and Katoh, M. 2002. Upregulation of GIPC2 in human gastric cancer. *Int. J. Oncol.* 20: 1183-1187.
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.

SOURCE

GIPC2 (P-22) is a Protein A purified rabbit polyclonal antibody raised against synthetic GIPC2 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

Store at 4° 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.

APPLICATIONS

GIPC2 (P-22) is recommended for detection of GIPC2 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

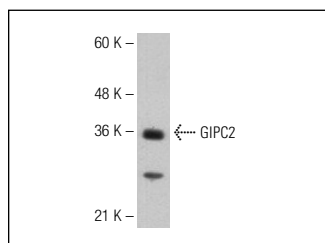
Molecular Weight of GIPC2: 34 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



GIPC2 (P-22): sc-133622. Western blot analysis of GIPC2 expression in Jurkat whole cell lysate.

PROTOCOLS

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

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Try **GIPC2 (G-7): sc-515441**, our highly recommended monoclonal alternative to GIPC2 (P-22).