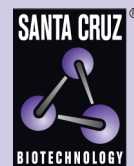


# GIPC2 (G-7): sc-515441



The Power to Question

## 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. Up-regulation 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.

## CHROMOSOMAL LOCATION

Genetic locus: GIPC2 (human) mapping to 1p31.1.

## SOURCE

GIPC2 (G-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 169-187 within an internal region of GIPC2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GIPC2 (G-7) is available conjugated to agarose (sc-515441 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515441 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515441 PE), fluorescein (sc-515441 FITC), Alexa Fluor® 488 (sc-515441 AF488), Alexa Fluor® 546 (sc-515441 AF546), Alexa Fluor® 594 (sc-515441 AF594) or Alexa Fluor® 647 (sc-515441 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515441 AF680) or Alexa Fluor® 790 (sc-515441 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515441 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

GIPC2 (G-7) is recommended for detection of GIPC2 of human origin by Western Blotting (starting dilution 1:100, 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).

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.

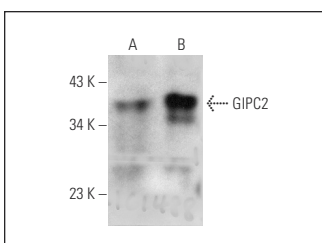
Molecular Weight of GIPC2: 34 kDa.

Positive Controls: human colon extract: sc-363757, COLO 205 whole cell lysate: sc-364177 or human testis extract: sc-363781.

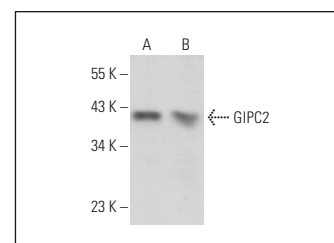
## RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



GIPC2 (G-7): sc-515441. Western blot analysis of GIPC2 expression in human colon (A) and human testis (B) tissue extracts.



GIPC2 (G-7): sc-515441. Western blot analysis of GIPC2 expression in COLO 205 whole cell lysate (A) and human colon tissue extract (B).

## SELECT PRODUCT CITATIONS

1. Wang, L., et al. 2022. GIPC2 interacts with Fzd7 to promote prostate cancer metastasis by activating WNT signaling. *Oncogene* 41: 2609-2623.

## 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.