SANTA CRUZ BIOTECHNOLOGY, INC.

GIPC3 (8H8): sc-517166

SANTA CRUZ BIOTECHNOLOGY

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. GIPC3 (GIPC PDZ domain containing family, member 3) is a 312 amino acid protein that contains one PDZ domain and is a member of the GIPC family. Widely expressed with highest expression in small intestine and fetal spleen, GIPC3 may participate in signaling events throughout the cell via its central PDZ domain. Expression of GIPC3 is upregulated in melanoma, cervical, chronic myelogenous and gastric cancer cell lines, suggesting a possible role in carcinogenesis.

REFERENCES

1. Ranganathan, R. and Ross, E.M. 1997. PDZ domain proteins: scaffolds for signaling complexes. Curr. Biol. 7: R770-R773.
2. Ponting, C.P., Phillips, C., Davies, K.E. and Blake, D.J. 1997. PDZ domains: targeting signalling molecules to submembranous sites. Bioessays 19: 469-479.
3. Saitoh, T., Mine, T. and Katoh, M. 2002. Molecular cloning and characterization of human GIPC3, a novel gene homologous to human GIPC1 and GIPC2. Int. J. Oncol. 20: 577-582.
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.
6. Saitoh, T., Mine, T. and Katoh, M. 2002. Molecular cloning and characterization of mouse GIPC3. Int. J. Mol. Med. 9: 251-256.
7. 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.
8. Katoh, M. 2002. GIPC gene family (review). Int. J. Mol. Med. 9: 585-589.

CHROMOSOMAL LOCATION

Genetic locus: GIPC3 (human) mapping to 19p13.3; Gipc3 (mouse) mapping to 10 C1.

SOURCE

GIPC3 (8H8) is a mouse monoclonal antibody raised against amino acids 213-311 representing partial length GIPC3 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

GIPC3 (8H8) is recommended for detection of GIPC3 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GIPC3 siRNA (h): sc-62376, GIPC3 siRNA (m): sc-62377, GIPC3 shRNA Plasmid (h): sc-62376-SH, GIPC3 shRNA Plasmid (m): sc-62377-SH, GIPC3 shRNA (h) Lentiviral Particles: sc-62376-V and GIPC3 shRNA (m) Lentiviral Particles: sc-62377-V.

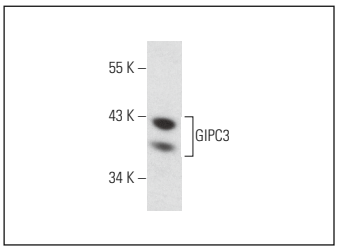
Molecular Weight of GIPC3: 34 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

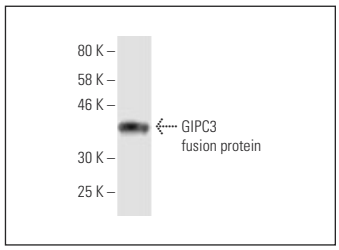
RECOMMENDED SUPPORT REAGENTS

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).

DATA



GIPC3 (8H8): sc-517166. Western blot analysis of GIPC3 expression in K-562 whole cell lysate.



GIPC3 (8H8): sc-517166. Western blot analysis of human recombinant GIPC3 fusion protein.

SELECT PRODUCT CITATIONS

1. Yang, J., Li, C., Chi, S., Wei, H., Du, W. and Hu, Q. 2022. Upregulation of microRNA-762 suppresses the expression of GIPC3 in systemic lupus erythematosus and neuropsychiatric systemic lupus erythematosus. Immun. Inflamm. Dis. 10: e719.

RESEARCH USE

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

PROTOCOLS

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