

GIT1 (H-170): sc-13961

BACKGROUND

Heterotrimeric G protein-mediated signal transduction is a dynamically regulated process with the intensity of signal decreasing over time despite the continued presence of the agonist. G protein-coupled receptor kinases (GRKs) are activated by activated G protein-coupled receptors, and they function to phosphorylate and inactivate cell surface receptors in the heterotrimeric G protein signaling cascade. GIT1 (for GRK-interactor 1) and GIT2 are GTPase-activating proteins (GAP) for members of the ADP ribosylation factor (ARF) family of small GTP-binding proteins, which are involved in vesicular trafficking. GIT1 overexpression results in reduced internalization and resensitization of β 2-adrenergic receptor, thus reducing β 2-adrenergic receptor signaling.

CHROMOSOMAL LOCATION

Genetic locus: GIT1 (human) mapping to 17q11.2; Git1 (mouse) mapping to 11 B5.

SOURCE

GIT1 (H-170) is a rabbit polyclonal antibody raised against amino acids 471-640 mapping near the N-terminus of GIT1 of human origin.

PRODUCT

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

APPLICATIONS

GIT1 (H-170) is recommended for detection of GIT1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GIT1 (H-170) is also recommended for detection of GIT1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GIT1 siRNA (h): sc-35477, GIT1 siRNA (m): sc-35478, GIT1 shRNA Plasmid (h): sc-35477-SH, GIT1 shRNA Plasmid (m): sc-35478-SH, GIT1 shRNA (h) Lentiviral Particles: sc-35477-V and GIT1 shRNA (m) Lentiviral Particles: sc-35478-V.

Molecular Weight of GIT1: 95 kDa.

Positive Controls: rat testis extract: sc-2400, SK-N-SH cell lysate: sc-2410 or rat brain extract: sc-2392.

STORAGE

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

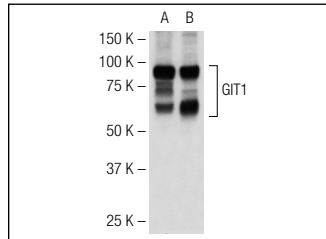
PROTOCOLS

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

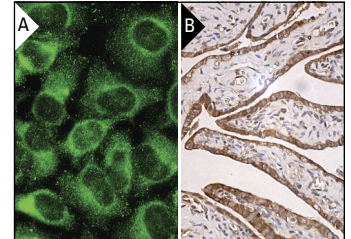
RESEARCH USE

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

DATA



GIT1 (H-170): sc-13961. Western blot analysis of GIT1 expression in rat testis tissue extract (A) and SK-N-SH whole cell lysate (B).



GIT1 (H-170): sc-13961. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded fallopian tube tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Premont, R.T., et al. 2004. The GIT/PIX complex: an oligomeric assembly of GIT family ARF GTPase-activating proteins and PIX family Rac1/Cdc42 guanine nucleotide exchange factors. *Cell. Signal.* 16: 1001-1011.
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- Missy, K., et al. 2008. α PIX Rho GTPase guanine nucleotide exchange factor regulates lymphocyte functions and antigen receptor signaling. *Mol. Cell. Biol.* 28: 3776-3789.
- Penela, P., et al. 2008. G protein-coupled receptor kinase 2 positively regulates epithelial cell migration. *EMBO J.* 27: 1206-1218.
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Try **GIT1 (A-1): sc-365084** or **GIT1 (E-7): sc-398637**, our highly recommended monoclonal alternatives to GIT1 (H-170).