

GIN1 (N-14): sc-167979

BACKGROUND

GIN1 (gypsy retrotransposon integrase-like protein 1), also known as TGIN1 (Ty3/Gypsy integrase 1) or ZH₂C₂ (zinc finger H₂C₂ domain-containing protein), is a 522 amino acid protein containing one integrase catalytic domain. Widely expressed, GIN1 is also found in tumors originating from parathyroid gland, colon, stomach, bladder, uterus and prostate. Three isoforms of GIN1 are produced by alternative splicing events. The gene encoding GIN1 maps to human chromosome 5q21.1. Chromosome 5 contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome. Treacher Collins syndrome, Cockayne syndrome and familial adenomatous polyposis are also associated with chromosome 5.

REFERENCES

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- Llorens, C., et al. 2001. A mammalian gene evolved from the integrase domain of an LTR retrotransposon. *Mol. Biol. Evol.* 18: 1597-1600.
- Kadmon, M., et al. 2001. Duodenal adenomatosis in familial adenomatous polyposis coli. A review of the literature and results from the Heidelberg Polyposis Register. *Int. J. Colorectal Dis.* 16: 63-75.
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CHROMOSOMAL LOCATION

Genetic locus: GIN1 (human) mapping to 5q21.1; Gin1 (mouse) mapping to 1 D.

SOURCE

GIN1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GIN1 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-167979 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GIN1 (N-14) is recommended for detection of GIN1 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); non cross-reactive with GIN4.

GIN1 (N-14) is also recommended for detection of GIN1 in additional species, including bovine and avian.

Suitable for use as control antibody for GIN1 siRNA (h): sc-91791, GIN1 siRNA (m): sc-145406, GIN1 shRNA Plasmid (h): sc-91791-SH, GIN1 shRNA Plasmid (m): sc-145406-SH, GIN1 shRNA (h) Lentiviral Particles: sc-91791-V and GIN1 shRNA (m) Lentiviral Particles: sc-145406-V.

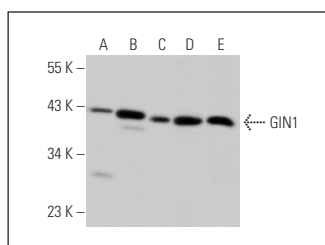
Molecular Weight of GIN1 isoform 1/2/3: 60/9/26 kDa.

Positive Controls: PANC-1 whole cell lysate: sc-364380, SW480 cell lysate: sc-2219 or PC-12 cell lysate: sc-2250.

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



GIN1 (N-14): sc-167979. Western blot analysis of GIN1 expression in NIH/3T3 (A), PANC-1 (B), SW480 (C), MES-SA/Dx5 (D) and PC-12 (E) whole cell lysates.

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.