SANTA CRUZ BIOTECHNOLOGY, INC.

GATSL3 (C-20): sc-86621



BACKGROUND

GATSL3 (GATS-like protein 3) is a 329 amino acid protein that belongs to the GATS family. The gene encoding GATSL3 maps to human chromosome 22, which contains over 500 genes and about 49 million bases. Being the second smallest human chromosome, 22 contains a surprising variety of interesting genes. Phelan-McDermid syndrome, Neurofibromatosis type 2 and autism are associated with chromosome 22. A schizophrenia susceptibility locus has been identified on chromosome 22 and studies show that 22q11 deletion symptoms include a high incidence of schizophrenia. Translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia chromosome and the subsequent production of the novel fusion protein, Bcr-Abl, a potent cell proliferation activator found in several types of leukemia.

REFERENCES

- Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. Chromosome 22. Genet. Test. 2: 89-97.
- 2. Schwab, S.G. and Wildenauer, D.B. 1999. Chromosome 22 workshop report. Am. J. Med. Genet. 88: 276-278.
- Tsilchorozidou, T., Menko, F.H., Lalloo, F., Kidd, A., De Silva, R., Thomas, H., Smith, P., Malcolmson, A., Dore, J., Madan, K., Brown, A., Yovos, J.G., Tsaligopoulos, M., Vogiatzis, N., Baser, M.E., Wallace, A.J. and Evans, D.G. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. J. Med. Genet. 41: 529-534.
- Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. J. Hum. Genet. 51: 1037-1045.
- Paylor, R., Glaser, B., Mupo, A., Ataliotis, P., Spencer, C., Sobotka, A., Sparks, C., Choi, C.H., Oghalai, J., Curran, S., Murphy, K.C., Monks, S., Williams, N., O'Donovan, M.C., Owen, M.J., Scambler, P.J. and Lindsay, E. 2006. Tbx1 haploinsufficiency is linked to behavioral disorders in mice and humans: implications for 22q11 deletion syndrome. Proc. Natl. Acad. Sci. USA 103: 7729-7734.

CHROMOSOMAL LOCATION

Genetic locus: GATSL3 (human) mapping to 22q12.2.

SOURCE

GATSL3 (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of GATSL3 of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86621 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

GATSL3 (C-20) is recommended for detection of GATSL3 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GATSL3 (C-20) is also recommended for detection of GATSL3 in additional species, including equine and porcine.

Suitable for use as control antibody for GATSL3 siRNA (h): sc-75555, GATSL3 shRNA Plasmid (h): sc-75555-SH and GATSL3 shRNA (h) Lentiviral Particles: sc-75555-V.

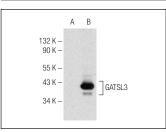
Molecular Weight of GATSL3: 36 kDa.

Positive Controls: human GATSL3 transfected HEK293T whole cell lysate.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.





GATSL3 (C-20): sc-86621. Western blot analysis of GATSL3 expression in non-transfected (**A**) and human GATSL3 transfected (**B**) HEK293T whole cell lysates.

RESEARCH USE

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

MONOS Satisfation Guaranteed Try GATSL3 (A-6): sc-377114 or GATSL3 (C-3): sc-377385, our highly recommended monoclonal alternatives to GATSL3 (C-20).