GXYLT2 (T-13): sc-99423



The Power to Question

BACKGROUND

GXYLT2 (glucoside xylosyltransferase 2), also known as GLT8D4 (glycosyltransferase 8 domain-containing protein 4), is a 443 amino acid single-pass type II membrane protein belonging to the glycosyltransferase 8 family. A xylosyltransferase, GXYLT2 transfers xylose to the 0-glucose-modified residues of Notch 1's epidermal growth factor (EGF) repeats. The gene encoding GXYLT2 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan Syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth Disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

- De Jonghe, P., Timmerman, V., FitzPatrick, D., Spoelders, P., Martin, J.J. and Van Broeckhoven, C. 1997. Mutilating neuropathic ulcerations in a chromosome 3q13-q22 linked Charcot-Marie-Tooth disease type 2B family. J. Neurol. Neurosurg. Psychiatr. 62: 570-573.
- Maho, A., Bensimon, A., Vassart, G. and Parmentier, M. 1999. Mapping of the CCXCR1, CX3CR1, CCBP2 and CCR9 genes to the CCR cluster within the 3p21.3 region of the human genome. Cytogenet. Cell Genet. 87: 265-268.
- 3. Pfeifer, G.P. and Dammann, R. 2005. Methylation of the tumor suppressor gene RASSF1A in human tumors. Biochemistry Mosc. 70: 576-583.
- Nair, P.N., McArdle, L., Cornell, J., Cohn, S.L. and Stallings, R.L. 2007. High-resolution analysis of 3p deletion in neuroblastoma and differential methylation of the SEMA3B tumor suppressor gene. Cancer Genet. Cytogenet. 174: 100-110.
- Rasmussen, A., Alonso, E., Ochoa, A., De Biase, I., Familiar, I., Yescas, P., Sosa, A.L., Rodríguez, Y., Chávez, M., López-López, M. and Bidichandani, S.I. 2010. Uptake of genetic testing and long-term tumor surveillance in von Hippel-Lindau disease. BMC Med. Genet. 11: 4.
- Sethi, M.K., Buettner, F.F., Krylov, V.B., Takeuchi, H., Nifantiev, N.E., Haltiwanger, R.S., Gerardy-Schahn, R. and Bakker, H. 2010. Identification of glycosyltransferase 8 family members as xylosyltransferases acting on O-glucosylated notch epidermal growth factor repeats. J. Biol. Chem. 285: 1582-1586.
- 7. Online Mendelian Inheritance in Man, OMIM™. 2010. Johns Hopkins University, Baltimore, MD. MIM Number: 613322. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: GXYLT2 (human) mapping to 3p13; Gxylt2 (mouse) mapping to 6 D3.

SOURCE

GXYLT2 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GXYLT2 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99423 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GXYLT2 (T-13) is recommended for detection of GXYLT2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other GLT family members.

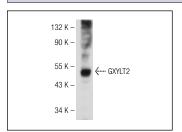
GXYLT2 (T-13) is also recommended for detection of GXYLT2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for GXYLT2 siRNA (h): sc-77937, GXYLT2 siRNA (m): sc-145439, GXYLT2 shRNA Plasmid (h): sc-77937-SH, GXYLT2 shRNA Plasmid (m): sc-145439-SH, GXYLT2 shRNA (h) Lentiviral Particles: sc-77937-V and GXYLT2 shRNA (m) Lentiviral Particles: sc-145439-V.

Molecular Weight of GXYLT2: 51 kDa.

Positive Controls: PC-12 cell lysate: sc-2250.

DATA



GXYLT2 (T-13): sc-99423. Western blot analysis of GXYLT2 expression in PC-12 whole cell lysate.

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.

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**