

GAL3ST4 (L-15): sc-164449

BACKGROUND

Sulfotransferase enzymes catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs and xenobiotic compounds. These enzymes differ in their tissue distribution and substrate specificity, although the gene structure (number and length of exons) is similar among family members. GAL3ST4 (galactose-3-O-sulfotransferase 4) is a 486 amino acid single pass type II membrane protein belonging to the galactose-3-O-sulfotransferase family. Localizing to Golgi apparatus, GAL3ST4 is expressed in thymus, testis, ovary, placenta, spinal cord, trachea and adrenal gland. Low levels of GAL3ST4 can be found in brain, lung, spleen, prostate, small intestine, colon, stomach thyroid and lymph node. GAL3ST4 catalyzes sulfonation by transferring sulfate to β -1,3-linked galactose residues in O-linked glycoproteins. GAL3ST4 utilizes manganese as a cofactor and Asialofetuin, Gal- β -1,3-GalNAc and Gal- β -1,3 (GlcNAc- β -1,6) GalNAc as substrates.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GAL3ST4 (human) mapping to 7q22.1; Gal3st4 (mouse) mapping to 5 G2.

RESEARCH USE

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

SOURCE

GAL3ST4 (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GAL3ST4 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.

Blocking peptide available for competition studies, sc-164449 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GAL3ST4 (L-15) is recommended for detection of GAL3ST4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 GAL3ST family members.

GAL3ST4 (L-15) is also recommended for detection of GAL3ST4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GAL3ST4 siRNA (h): sc-89662, GAL3ST4 siRNA (m): sc-145309, GAL3ST4 shRNA Plasmid (h): sc-89662-SH, GAL3ST4 shRNA Plasmid (m): sc-145309-SH, GAL3ST4 shRNA (h) Lentiviral Particles: sc-89662-V and GAL3ST4 shRNA (m) Lentiviral Particles: sc-145309-V.

Molecular Weight of GAL3ST4: 54 kDa.

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) 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.

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.