

# GAL3ST2 (I-12): sc-167943

## 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. GAL3ST2 (galactose-3-O-sulfotransferase 2), also known as GP3ST, is a 398 amino acid single-pass type II membrane protein belonging to the galactose-3-O-sulfotransferase family. GAL3ST2 localizes to Golgi apparatus and is ubiquitously expressed with high levels of expression found in heart, stomach, colon, liver and spleen. Strongly inhibited by  $\text{Cu}^{2+}$  and  $\text{Zn}^{2+}$ , GAL3ST2 catalyzes sulfonation by transferring a sulfate group to the 3' position of non-reducing  $\beta$ -galactosyl residues and may also be involved in tumor metastasis by regulating the expression of integrins and the ability to adhere to selectins.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Gal3st2 (mouse) mapping to 1 D.

## SOURCE

GAL3ST2 (I-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GAL3ST2 of mouse origin.

## PRODUCT

Each vial contains 200  $\mu\text{g}$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167943 P, (100  $\mu\text{g}$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GAL3ST2 (I-12) is recommended for detection of GAL3ST2 of mouse and rat 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 GAL3ST1, GAL3ST3 or GAL3ST4.

Suitable for use as control antibody for GAL3ST2 siRNA (m): sc-145307, GAL3ST2 shRNA Plasmid (m): sc-145307-SH and GAL3ST2 shRNA (m) Lentiviral Particles: sc-145307-V.

Molecular Weight of GAL3ST2: 46 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.