

galectin-13 (T-11): sc-131938

BACKGROUND

Galectins are a family of soluble β -galactoside-binding animal lectins that modulate cell-to-cell adhesion and cell-to-extracellular matrix (ECM) interactions and play a role in tumor progression, pre-mRNA splicing and apoptosis. One such member, galectin-13, which is also known as LGALS13 (lectin, galactoside-binding, soluble, 13), GAL13, PP13 (placental tissue protein 13) or PLAC8, is a 139 amino acid protein that contains one galectin domain. Possessing lysophospholipase activity, galectin-13 exists as a disulfide-linked homodimer that is expressed in spleen, adult urinary bladder and placenta and fetal kidney. Galectin-13 is suggested to have a developmental role in the placenta and may display immunobiological activity in fetomaternal blood-spaces. Screening for galectin-13 in maternal serum during the first trimester of pregnancy may serve as a diagnostic marker to predict preterm preeclampsia.

REFERENCES

1. Bohn, H., et al. 1983. Purification and characterization of two new soluble placental tissue proteins (PP13 and PP17). *Oncodev. Biol. Med.* 4: 343-350.
2. Than, N.G., et al. 1999. Isolation and sequence analysis of a cDNA encoding human placental tissue protein 13 (PP13), a new lysophospholipase, homologue of human eosinophil Charcot-Leyden Crystal protein. *Placenta* 20: 703-710.
3. Than, N.G., et al. 2004. Functional analyses of placental protein 13/galectin-13. *Eur. J. Biochem.* 271: 1065-1078.
4. Gebhardt, S., et al. 2009. A novel exonic variant (221delT) in the LGALS13 gene encoding placental protein 13 (PP13) is associated with preterm labour in a low risk population. *J. Reprod. Immunol.* 82: 166-173.
5. Akolekar, R., et al. 2009. Maternal serum placental protein 13 at 11-13 weeks of gestation in preeclampsia. *Prenat. Diagn.* 29: 1103-1108.
6. Shimizu, H., et al. 2009. PP13 mRNA expression in the cellular component of maternal blood as a marker for preeclampsia. *Prenat. Diagn.* 29: 1231-1236.
7. Koster, M.P., et al. 2009. Placental protein 13 as a first trimester screening marker for aneuploidy. *Prenat. Diagn.* 29: 1237-1241.

CHROMOSOMAL LOCATION

Genetic locus: LGALS13 (human) mapping to 19q13.2.

SOURCE

galectin-13 (T-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of galectin-13 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-131938 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

galectin-13 (T-11) is recommended for detection of galectin-13 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); non cross-reactive with other galectin family members.

Suitable for use as control antibody for galectin-13 siRNA (h): sc-97161, galectin-13 shRNA Plasmid (h): sc-97161-SH and galectin-13 shRNA (h) Lentiviral Particles: sc-97161-V.

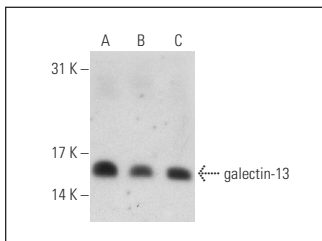
Molecular Weight of galectin-13: 16 kDa.

Positive Controls: SJRH30 cell lysate: sc-2287, K-562 whole cell lysate: sc-2203 or TT whole cell lysate: sc-364195.

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



galectin-13 (T-11): sc-131938. Western blot analysis of galectin-13 expression in TT (A), K-562 (B) and SJRH30 (C) 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.

PROTOCOLS

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