

SMAGP (K-15): sc-248655

BACKGROUND

SMAGP (small transmembrane and glycosylated protein) is a 97 amino acid single-pass type III membrane protein that localizes to the membrane of cytoplasmic vesicles. Existing as a murine-specific protein, SMAGP is thought to play a role in epithelial cell-cell contacts and, via its ability to control cell adhesion, may be involved in tumor formation, as well as overall tumor invasiveness and metastasis. SMAGP is subject to post-translational O-glycosylation which is thought to be modified with sialic acid residues. The gene encoding SMAGP maps to murine chromosome 15.

REFERENCES

- Ferrantini, M., Benedetto, A., Elia, G., Amici, C. and Belardelli, F. 1988. Membrane changes during tumor progression. Host control of metastatic spread. *Ann. Ist. Super. Sanita* 24: 159-170.
- Ponta, H., Sleeman, J. and Herrlich, P. 1994. Tumor metastasis formation: cell-surface proteins confer metastasis-promoting or -suppressing properties. *Biochim. Biophys. Acta* 1198: 1-10.
- Tarbé, N.G., Rio, M.C. and Weidle, U.H. 2004. SMAGP, a new small transmembrane glycoprotein altered in cancer. *Oncogene* 23: 3395-3403.
- Tarbé, N.G., Rio, M.C., Hummel, S., Weidle, U.H. and Zöller, M. 2005. Overexpression of the small transmembrane and glycosylated protein SMAGP supports metastasis formation of a rat pancreatic adenocarcinoma line. *Int. J. Cancer* 117: 913-922.
- Stafford, L.J., Vaidya, K.S. and Welch, D.R. 2008. Metastasis suppressor genes in cancer. *Int. J. Biochem. Cell Biol.* 40: 874-891

CHROMOSOMAL LOCATION

Genetic locus: SMAGP (human) mapping to 12q13.13; Smagp (mouse) mapping to 15 F1.

SOURCE

SMAGP (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of SMAGP of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-248655 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

SMAGP (K-15) is recommended for detection of SMAGP 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).

SMAGP (K-15) is also recommended for detection of SMAGP in additional species, including equine.

Suitable for use as control antibody for SMAGP siRNA (h): sc-96147, SMAGP siRNA (m): sc-153614, SMAGP shRNA Plasmid (h): sc-96147-SH, SMAGP shRNA Plasmid (m): sc-153614-SH, SMAGP shRNA (h) Lentiviral Particles: sc-96147-V and SMAGP shRNA (m) Lentiviral Particles: sc-153614-V.

Molecular Weight of SMAGP precursor: 11 kDa.

Molecular Weight of mature SMAGP: 25 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.

RESEARCH USE

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