

Mucin 17 (C-19): sc-32602

BACKGROUND

The mucins are a family of highly glycosylated, secreted proteins with a basic structure consisting of a variable number of tandem repeats (VNTRs). Membrane-associated and secretory mucins are high molecular weight glycoproteins of the glycocalyx (polysaccharide biofilm) that protects mucosal epithelium from particulate matter and microorganisms. Epithelial mucins are large, secreted and cell surface glycoproteins crucial for adhesion modulation, signaling and epithelial cell protection. The number of repeats is highly polymorphic and varies among different alleles. The mucin family consists of Mucins 1-4, Mucin 5 (AC and B), Mucins 6-8, Mucins 11-13 and Mucins 15-17. Mucin 17, encoded for by the MUC17 gene, is a membrane bound protein. Like other membrane mucins, Mucin 17 provides cytoprotection in epithelial cells, maintain luminal structure and providing signal transduction. In cancer cells that lose their apical or basal polarization it can confer anti-adhesive properties.

REFERENCES

1. Van Klinken, B.J., et al. 1997. Molecular cloning of human MUC3 cDNA reveals a novel 59 amino acid tandem repeat region. *Biochem. Biophys. Res. Commun.* 238: 143-148.
2. Gum, J.R. Jr., et al. 2002. MUC17, a novel membrane-tethered mucin. *Biochem. Biophys. Res. Commun.* 291: 466-475.
4. Corrales, R.M., et al. 2003. Normal human conjunctival epithelium expresses MUC13, MUC15, MUC16 and MUC17 mucin genes. *Arch. Soc. Esp. Ophthalmol.* 78: 375-381.
5. Ho, J.J., et al. 2003. N-glycosylation is required for the surface localization of MUC17 mucin. *Int. J. Oncol.* 23: 585-592.
6. Seo, J.T., et al. 2005. Expression of mucin genes in the human testis and its relationship to spermatogenesis. *Yonsei. Med. J.* 46: 667-672.

CHROMOSOMAL LOCATION

Genetic locus: MUC17 (human) mapping to 7q22.1.

SOURCE

Mucin 17 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Mucin 17 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-32602 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.

RESEARCH USE

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

APPLICATIONS

Mucin 17 (C-19) is recommended for detection of Mucin 17 of 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).

Suitable for use as control antibody for Mucin 17 siRNA (h): sc-44612.

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.

PROTOCOLS

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