**BACKGROUND**

Mucins are a group of high molecular weight glycoproteins consisting of a mucin core protein and O-linked carbohydrates. The Mucin 5B gene, which contains a 3’ cis-element, is one of the four mucin genes mapped to human chromosome 11p15.5. Although Mucin 5B is the prominent human gallbladder mucin, it is also expressed and secreted in the colon. In addition, Mucin 5B is expressed in non-inflamed middle ears and normal esophagus, and is upregulated by chronic inflammation and highly secreted in the diseased middle ear. Mucin 5B is abnormally expressed in gastric carcinomatous tissues. Its expression in gastric cancer cells is controlled by a highly active distal promoter, which is upregulated by protein kinase C and repressed under the influence of methylation. Mucous differentiation and expression of Mucin 5B is retinoic acid (RA)- or retinol-dependent. RA control of Mucin gene is mediated by the retinoid acid receptor RARα and, to a lesser extent, by RARγ. The correlation of Mucin protein levels in human cervical mucus with the peak at midcycle suggests that Mucin may be important in sperm transit to the uterus.

**REFERENCES**


2. van Klinken, B.J., et al. 1998. Mucin5B is the prominent mucin in human gallbladder and is also expressed in a subset of colonic goblet cells. Am. J. Physiol. 274: R71-87.


**CHROMOSOMAL LOCATION**

Genetic locus: MUC5B (human) mapping to 11p15.5; Muc5b (mouse) mapping to 7 F5.

**SOURCE**

Mucin 5B (4H310) is a mouse monoclonal antibody raised against a peptide mapping at the N-terminus of Mucin 5B of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Mucin 5B (4H310) is recommended for detection of Mucin 5B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Mucin 5B siRNA (h): sc-106263, Mucin 5B siRNA (m): sc-149704, Mucin 5B shRNA Plasmid (h): sc-106263-SH, Mucin 5B shRNA Plasmid (m): sc-149704-SH, Mucin 5B shRNA (h) Lentiviral Particles: sc-106263-V and Mucin 5B shRNA (m) Lentiviral Particles: sc-149704-V.

Molecular Weight of Mucin 5B: 600 kDa.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**SELECT PRODUCT CITATIONS**


**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 for detailed protocols and support products.