SANTA CRUZ BIOTECHNOLOGY, INC.

Mucin 13 (m): 293T Lysate: sc-121860

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Mucins are epithelial glycoproteins with a high content of clustered oligosaccharides that are O-glycoside-linked to tandem repeat peptides rich in threonine, serine and proline. Mucin 13 (MUC13), also designated downregulated in colon cancer 1 (DRCC1), is an epithelial and hemopoietic type I membrane protein that undergoes secretion and influences gastrointestinal mucosa levels. It is most abundant in epithelial tissues of the gastrointestinal and respiratory tracts, such as large intestine and trachea, followed by kidney, small intestine, appendix and stomach. Mucin 13 is a good differentiation marker for gastrointestinal mucosa and may also indicate certain gastric tumors. It localizes to the apical membrane of both columnar and goblet cells in the gastrointestinal tract, and within goblet cell thecae. Mucin 13 is a cleaved protein and the β subunit, containing the cytoplasmic tail, can homodimerize.

REFERENCES

1. Williams, S.J., et al. 2001. MUC13, a novel human cell surface mucin expressed by epithelial and hemopoietic cells. J. Biol. Chem. 276: 18327-18336.
2. Corrales, R.M., et al. 2003. Normal human conjunctival epithelium expresses MUC13, MUC15, MUC16 and MUC17 mucin genes. Arch. Soc. Esp. Oftalmol. 78: 375-381.
3. Carraway, K.L., et al. 2003. Cell signaling through membrane mucins. Bioessays 25: 66-71.
4. Packer, L.M., et al. 2004. Expression of the cell surface mucin gene family in adenocarcinomas. Int. J. Oncol. 25: 1119-1126.
5. Byrd, J.C., et al. 2004. Mucins and mucin-binding proteins in colorectal cancer. Cancer Metastasis Rev. 23: 77-99.
6. Hollingsworth, M.A., et al. 2004. Mucins in cancer: protection and control of the cell surface. Nat. Rev. Cancer 4: 45-60.
7. Shimamura, T., et al. 2005. Overexpression of MUC13 is associated with intestinal-type gastric cancer. Cancer Sci. 96: 265-273.
8. Byrd, J.C., et al. 2004. Mucins and mucin binding proteins in colorectal cancer. Cancer Metastasis Rev 23: 77-99.

CHROMOSOMAL LOCATION

Genetic locus: Muc13 (mouse) mapping to 16 B3.

PRODUCT

Mucin 13 (m): 293T Lysate represents a lysate of mouse Mucin 13 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Mucin 13 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Mucin 13 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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