

Mucin 6 (T-20): sc-16914

BACKGROUND

Mucin 6 (also designated MUC 6 and gastric mucin) is a large glycoprotein that plays a major role in the protection of the gastrointestinal tract. MUC6 carries GlcNAc α 1 \rightarrow 4Gal β \rightarrow R structures, indicating that α 1, 4-N-acetylglucosaminyltransferase is important to the formation of the mucous glycoproteins *in vivo*. Mucin 6 expression is highest in the stomach and gall bladder, with lower expression in the terminal ileum and right colon. In gastric cancer, Mucin 6 has an altered expression. In normal stomach, Mucin 6 apomucin is associated with Lewis type 2; Mucin 6 is also expressed in gastric metaplasia, duodenum and pancreas. Mucin 6 is a secretory mucin, located in the deeper mucosal folds of human gall bladder, and its expression is altered with increasing degrees of inflammation. Mucin 6 mRNA is expressed transiently in the nephrogenic zone of the kidney in the early mid-trimester of development, and Mucin 6 glycoprotein is expressed in the epithelium of ureteric buds and collecting ducts, but absent from adult kidney. Proliferating bile ductular cells express Mucin 6 apomucin in diseased liver, especially in chronic viral hepatitis with active necroinflammation, suggesting that this secreted mucin acts as a cytoprotective agent and represents a phenotype of reactive biliary epithelium in chronic viral hepatitis.

CHROMOSOMAL LOCATION

Genetic locus: MUC6 (human) mapping to 11p15.5.

SOURCE

Mucin 6 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Mucin 6 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-16914 P, (100 μ g 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.

APPLICATIONS

Mucin 6 (T-20) is recommended for detection of Mucin 6 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

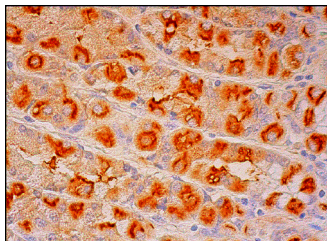
Suitable for use as control antibody for Mucin 6 siRNA (h): sc-43166, Mucin 6 shRNA Plasmid (h): sc-43166-SH and Mucin 6 shRNA (h) Lentiviral Particles: sc-43166-V.

Molecular Weight of Mucin 6: 252 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Mucin 6 (T-20): sc-16914. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lower stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Kuver, R., et al. 2006. Absence of CFTR is associated with pleiotropic effects on mucins in mouse gallbladder epithelial cells. *Am. J. Physiol. Gastrointest. Liver Physiol.* 291: G1148-G1154.
- Jung, S.R., et al. 2009. Control of granule mobility and exocytosis by Ca²⁺-dependent formation of F-actin in pancreatic duct epithelial cells. *Traffic* 10: 392-410.

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.



Try **Mucin 6 (CLH5): sc-33668**, our highly recommended monoclonal alternative to Mucin 6 (T-20).