**BACKGROUND**

The Mucins are a family of highly glycosylated, secreted proteins with a basic structure consisting of a variable number of tandem repeats (VNTRs) encoded by 60 base pairs (Mucin 1), 69 base pairs (Mucin 2) and 51 base pairs (Mucin 3). The number of repeats is highly polymorphic and varies among different alleles. Mucin 1 proteins are expressed as type I membrane proteins in addition to secreted forms. Mucin 1 is aberrantly expressed in epithelial tumors including breast carcinomas. Mucin 2 coats the epithelia of the intestines and airways and is associated with colonic tumors. Mucin 3 is a major component of various mucous gels and is broadly expressed in normal and tumor cells.

**CHROMOSOMAL LOCATION**

Genetic locus: MUC3A (human) mapping to 7q22.1.

**SOURCE**

Mucin 3 (M3.1) is a mouse monoclonal antibody epitope corresponding to the tandem repeat region of Mucin 3 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Mucin 3 (M3.1) is recommended for detection of Mucin 3 of 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)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Mucin 3A siRNA (h): sc-43162, Mucin 3A shRNA Plasmid (h): sc-43162-Sh and Mucin 3A shRNA (h) Lentiviral Particles: sc-43162-V.

Molecular Weight of Mucin 3: 1100 kDa.

Positive Controls: human colon extract: sc-363757.

**RECOMMENDED SUPPORT REAGENTS**

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

1. Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-ÇM (dilution range: 1:100-1:1000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

2. Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).


**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

**SELECT PRODUCT CITATIONS**


**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.