# SANTA CRUZ BIOTECHNOLOGY, INC.

# Mucin 1 (M8C9): sc-52092



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 mucus gels and is broadly expressed in normal and tumor cells.

#### REFERENCES

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- 4. Pandey, P., et al. 1995. Association of the DF3/Mucin 1 breast cancer antigen with GRB2 and the Sos/Ras exchange protein. Cancer Res. 55: 4000-4003.
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- Horne, A.W., et al. 2005. The expression pattern of MUC1 glycoforms and other biomarkers of endometrial receptivity in fertile and infertile women. Mol. Reprod. Dev. 72: 216-229.
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# CHROMOSOMAL LOCATION

Genetic locus: MUC1 (human) mapping to 1q22.

# SOURCE

Mucin 1 (M8C9) is a mouse monoclonal antibody raised against high moleular weight glycoprotein from milk-fat globule molecule of human origin.

# **RESEARCH USE**

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

#### PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

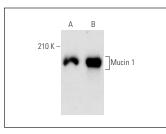
Mucin 1 (M8C9) is recommended for detection of VNTR5 and VNTR20 recombinant unglycosylated fragments of Mucin 1 protein and underglycosylated Mucin 1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total 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 1 siRNA (h): sc-35985, Mucin 1 shRNA Plasmid (h): sc-35985-SH and Mucin 1 shRNA (h) Lentiviral Particles: sc-35985-V.

Molecular Weight of Mucin 1: 200 kDa.

Positive Controls: BT-20 cell lysate: sc-2223, DU 145 cell lysate: sc-2268 or MCF7 whole cell lysate: sc-2206.

#### DATA



Mucin 1 (M8C9): sc-52092. Western blot analysis of Mucin 1 expression in BT-20 (**A**) and DU 145 (**B**) whole cell lysates.

#### **STORAGE**

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

#### **PROTOCOLS**

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

# CONJUGATES

See **Mucin 1 (VU4H5): sc-7313** for Mucin 1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor<sup>®</sup> 488, 546, 594, 647, 680 and 790.