SANTA CRUZ BIOTECHNOLOGY, INC.

MCC (D-20): sc-54094

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

MCC (mutated in colorectal cancers), also known as MCC1, is a coiled-coil protein that localizes to the cytoplasm. It is involved in cell cycle regulation, negatively regulating cell cycle progression during the G_1 to S transition via a role in the NFκB signaling pathway. More specifically, MCC interacts with the NFκB inhibitor, IκBβ, playing a role in its stabilization and thereby inhibiting the nuclear translocation and signaling of NFκB. This suggests that MCC may act as a tumor suppressor. MCC is a phosphorylated protein and the state of phosphorylation changes in relation to the cell cycle. This implies that its function may be regulated by phosphorylation. MCC is highly phosphorylated during the transition from G_1 to S phase and weakly phosphorylated in G_0/G_1. The overexpression of MCC results in a decreased number of cells entering S phase.

REFERENCES

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3. Fang, D.C., et al. 2002. Telomere erosion is independent of microsatellite instability but related to loss of heterozygosity in gastric cancer. World J. Gastroenterol. 7: 522-526.
4. Wang, M., et al. 2002. The possible role of loss of heterozygosity at APC, MCC and DCC genetic loci in esophageal carcinoma. Zhonghua Zhong Liu Za Zhi 21: 16-18.
5. Sikdar, N., et al. 2003. Loss of heterozygosity at APC and MCC genes of oral cancer and leukoplakia tissues from Indian tobacco chewers. J. Oral Pathol. Med. 32: 450-454.
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7. Bouwmeester, T., et al. 2004. A physical and functional map of the human TNFα/NFκB signal transduction pathway. Nat. Cell Biol. 6: 97-105.
8. Cong, W.M., et al. 2005. Study on loss of heterozygosity and microsatellite instability in hepatocellular carcinoma. Zhonghua Bing Li Xue Za Zhi 34: 71-74.

CHROMOSOMAL LOCATION

Genetic locus: MCC (human) mapping to 5q22.2; Mcc (mouse) mapping to 18 B3.

SOURCE

MCC (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MCC of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54094 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MCC (D-20) is recommended for detection of MCC of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MCC (D-20) is also recommended for detection of MCC in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for MCC siRNA (h): sc-106908, MCC siRNA (m): sc-149317, MCC shRNA Plasmid (h): sc-106908-SH, MCC shRNA Plasmid (m): sc-149317-SH, MCC shRNA (h) Lentiviral Particles: sc-106908-V and MCC shRNA (m) Lentiviral Particles: sc-149317-V.

Molecular Weight of MCC phosphoprotein: 100 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.

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.

MONOS Satisfaction Guaranteed

Try **MCC (A-9): sc-398216** or **MCC (1): sc-135982**, our highly recommended monoclonal alternatives to MCC (D-20).