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 G1 to S transition via a role in the NFκB signaling pathway. More specifically, MCC interacts with the NFκB inhibitor, IκB-β, 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 G1 to S phase and weakly phosphorylated in G0/G1. The overexpression of MCC results in a decreased number of cells entering S phase.

REFERENCES


CHROMOSOMAL LOCATION

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

SOURCE

MCC (1) is a mouse monoclonal antibody raised against amino acids 5-146 of MCC of human origin.

PRODUCT

Each vial contains 200 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

MCC (1) 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500); not recommended for immunoprecipitation.

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.

Positive Controls: IMR-32 cell lysate: sc-2409, NIH/3T3 whole cell lysate: sc-2210 or HCT 116 whole cell lysate: sc-364175.

DATA

MCC (1): sc-135982. Western blot analysis of MCC expression in IMR-32 (A), HCT-116 (B), Y79 (C) and NIH/3T3 (D) whole cell lysates.

SELECT PRODUCT CITATIONS


RESEARCH USE

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

PROTOCOLS

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