SANTA CRUZ BIOTECHNOLOGY, INC.

MIA (H-70): sc-28868

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Tumorigenesis is a process that is mediated by a network of membrane, cytosolic and nuclear associated factors, which regulate proliferation and cell-matrix interaction through signaling cascades. The phenotype of malignant melanomas *in vivo* depends on the global expression of stimulatory or inhibitory factors generated in both the tumors cells and their environment. One example, melanoma inhibitory activity (cartilage-derived retinoic acid-sensitive protein (CD-RAP), MIA) is a Src homology 3 (SH3)-like domain containing protein that is secreted from chondrocytes and malignant melanoma cells. MIA is translated as a 131-amino acid proform and processed into a mature 107-amino acid protein after cleavage of a secretion signal. MIA is expressed during chondrogenesis and in mature chondrocytes, suggesting that MIA is necessary for normal cartilage cell phenotype. MIA mRNA is present in carcinomas of the colon, ovary, kidney, and head/neck, and may represent a marker to monitor melanomic activity.

CHROMOSOMAL LOCATION

Genetic locus: MIA (human) mapping to 19q13.2; Mia1 (mouse) mapping to 7 A3.

SOURCE

MIA (H-70) is a rabbit polyclonal antibody raised against amino acids 62-131 mapping at the C-terminus of MIA of human origin.

PRODUCT

Each vial contains 200 µg IgG 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

MIA (H-70) is recommended for detection of precursor and mature forms of MIA of mouse, rat and 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), 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).

MIA (H-70) is also recommended for detection of precursor and mature forms of MIA in additional species, including equine, canine, bovine and porcine.

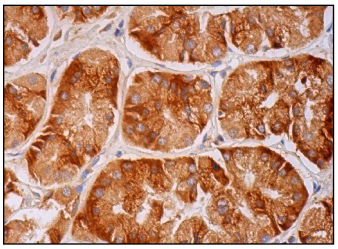
Suitable for use as control antibody for MIA siRNA (h): sc-40742, MIA siRNA (m): sc-40743, MIA shRNA Plasmid (h): sc-40742-SH, MIA shRNA Plasmid (m): sc-40743-SH, MIA shRNA (h) Lentiviral Particles: sc-40742-V and MIA shRNA (m) Lentiviral Particles: sc-40743-V.

Molecular Weight of MIA: 12 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



MIA (H-70): sc-28868. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

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.