SANTA CRUZ BIOTECHNOLOGY, INC.

MTA2 (D-17): sc-32099

BACKGROUND

MTA1 (metastasis-associated protein 1) is a component of the NURD (nucleosome remodeling and histone deacetylation) complex, which is associated with ATP-dependent chromatin-remodeling and histone deacetylase activity. MTA1 functions in conjunction with other components of NURD to mediate transcriptional repression as it facilitates the association of repressor molecules with the chromatin. Structurally, MTA1 contains a single SH3-binding motif and a zinc finger domain, along with a region similar to the co-repressor protein N-Cor. MTA1 is normally expressed at low levels in various tissues and is more highly expressed in testis. Overexpression of MTA1 correlates with tumor invasion and metastasis in various carcinomas including colorectal, gastrointestinal and breast carcinomas. Elevation of MTA1 levels in these tumors appears to enhance the metastases to lymph nodes, increase mammary cell motility and potentiate growth, and therefore may be an indicator for assessing the potential malignancies of various tumors. A similar protein, MTA2, also designated MTA1-L1 (MTA1-like protein 1), shares more than 55% sequence homology with MTA1 and is ubiquitously expressed.

CHROMOSOMAL LOCATION

Genetic locus: MTA2 (human) mapping to 11q12.3; Mta2 (mouse) mapping to 19 A.

SOURCE

MTA2 (D-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MTA2 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.

Blocking peptide available for competition studies, sc-32099 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MTA2 (D-17) is recommended for detection of MTA2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MTA2 (D-17) is also recommended for detection of MTA2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MTA2 siRNA (h): sc-35983, MTA2 siRNA (m): sc-35984, MTA2 shRNA Plasmid (h): sc-35983-SH, MTA2 shRNA Plasmid (m): sc-35984-SH, MTA2 shRNA (h) Lentiviral Particles: sc-35983-V and MTA2 shRNA (m) Lentiviral Particles: sc-35984-V.

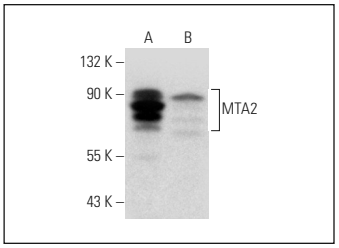
Molecular Weight of MTA2: 75 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, KNRK nuclear extract: sc-2141 or SK-BR-3 nuclear extract: sc-2134.

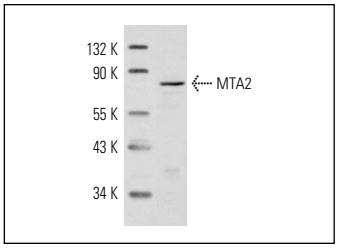
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



MTA2 (D-17): sc-32099. Western blot analysis of MTA2 expression in KNRK (**A**) and SK-BR-3 (**B**) nuclear extracts.



MTA2 (D-17): sc-32099. Western blot analysis of MTA2 expression in HeLa nuclear extract.

STORAGE

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

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.