SANTA CRUZ BIOTECHNOLOGY, INC.

MDA-7 (C-16): sc-8704

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

MDA-7 (melanoma differentiation associated protein-7) was initially identified in cultured human melanoma cells, following treatment with interferon-β and mezerin, a treatment that causes the cells to lose proliferative capacity and terminally differentiate. MDA-7 was shown to have antiproliferative properties in human melanoma cells, and to reduce cell growth in tumors of diverse origin. The level of MDA-7 expression is inversely correlated with human melanoma progression, with the highest levels found in normal, proliferating melanocytes, and the lowest levels found in metastatic melanoma. Overexpression of MDA-7 in human breast cancer cells was shown to induce apoptosis and upregulate Bax expression in a p53-independent manner. However, MDA-7 does not elicit growth inhibition and apoptosis in normal, non-tumor cells.

CHROMOSOMAL LOCATION

Genetic locus: IL24 (human) mapping to 1q32.1; Il24 (mouse) mapping to 1 E4.

SOURCE

MDA-7 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MDA-7 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-8704 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MDA-7 (C-16) is recommended for detection of MDA-7 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), 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).

MDA-7 (C-16) is also recommended for detection of MDA-7 (also designated IL-24) in additional species, including equine, canine and porcine.

Suitable for use as control antibody for MDA-7 siRNA (h): sc-37446, MDA-7 siRNA (m): sc-37447, MDA-7 shRNA Plasmid (h): sc-37446-SH, MDA-7 shRNA Plasmid (m): sc-37447-SH, MDA-7 shRNA (h) Lentiviral Particles: sc-37446-V and MDA-7 shRNA (m) Lentiviral Particles: sc-37447-V.

Molecular Weight of MDA-7: 24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

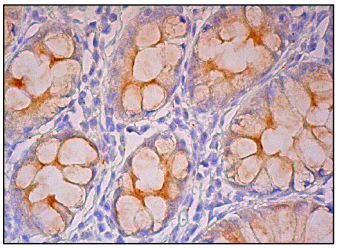
STORAGE

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.

DATA



MDA-7 (C-16): sc-8704. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Xie, Y., et al. 2008. Recombinant human IL-24 suppresses lung carcinoma cell growth via induction of cell apoptosis and inhibition of tumor angiogenesis. Cancer Biother. Radiopharm. 23: 310-320.
2. Patani, N., et al. 2010. Tumour suppressor function of MDA-7/IL-24 in human breast cancer. Cancer Cell. Int. 10: 29.
3. Ablin, R.J., et al. 2011. Prostate transglutaminase (TGase-4) antagonizes the anti-tumour action of MDA-7/IL-24 in prostate cancer. J. Transl. Med. 9: 49.
4. Bosanquet, D.C., et al. 2012. Expression of IL-24 and IL-24 receptors in human wound tissues and the biological implications of IL-24 on keratinocytes. Wound Repair Regen. 20: 896-903.
5. Pei, D.S., et al. 2012. Enhanced apoptosis-inducing function of MDA-7/IL-24 RGD mutant via the increased adhesion to tumor cells. J. Interferon Cytokine Res. 32: 66-73.

PROTOCOLS

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