

# MDA-7 (V-20): sc-12408

## BACKGROUND

MDA-7 (melanoma differentiation associated protein-7) was initially identified in cultured human melanoma cells, following treatment with interferon  $\beta$  and mezerein, 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.

## REFERENCES

1. Fisher, P.B., et al. 1985. Effects of combined treatment with interferon and mezerein on melanogenesis and growth in human melanoma cells. *J. Interferon Res.* 5: 11-22.
2. Jiang, H., et al. 1995. Subtraction hybridization identifies a novel melanoma differentiation associated gene, mda-7, modulated during human melanoma differentiation, growth and progression. *Oncogene* 11: 2477-2486.

## CHROMOSOMAL LOCATION

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

## SOURCE

MDA-7 (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MDA-7 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12408 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MDA-7 (V-20) is recommended for detection of MDA-7 (also designated IL-24) 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).

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.

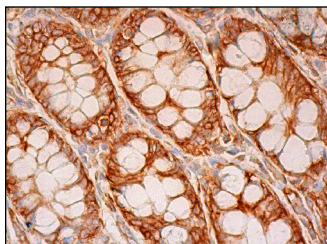
Molecular Weight of MDA-7: 24 kDa.

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

## 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



MDA-7 (V-20): sc-12408. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic and membrane staining of glandular cells.

## SELECT PRODUCT CITATIONS

1. Ishikawa, S., et al. 2005. Expression of MDA-7/IL-24 and its clinical significance in resected non-small cell lung cancer. *Clin. Cancer Res.* 11: 1198-1202.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **MDA-7 (Y14): sc-80184**, our highly recommended monoclonal alternative to MDA-7 (V-20).