

# MDA-7 (H-190): sc-22769

## 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 (H-190) is a rabbit polyclonal antibody raised against amino acids 1-190 mapping at the N-terminus 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.

## APPLICATIONS

MDA-7 (H-190) is recommended for detection of MDA-7 (also designated IL-24) of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

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.

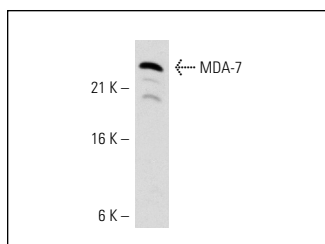
Molecular Weight of MDA-7: 24 kDa.

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

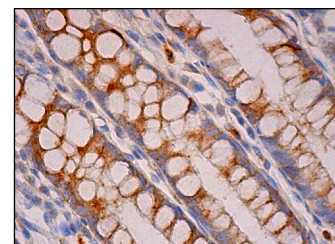
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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



MDA-7 (H-190): sc-22769. Western blot analysis of MDA-7 expression in HeLa whole cell lysate.



MDA-7 (H-190): sc-22769. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic staining of glandular cells.

## SELECT PRODUCT CITATIONS

1. Li, J., et al. 2010. Recombinant adenovirus IL-24-Bax promotes apoptosis of hepatocellular carcinoma cells *in vitro* and *in vivo*. *Cancer Gene Ther.* 17: 771-779.
2. Wang, L., et al. 2014. Melanoma differentiation-associated gene-7/interleukin-24 as a potential prognostic biomarker and second primary malignancy indicator in head and neck squamous cell carcinoma patients. *Tumour Biol.* 35: 10977-10985.

## 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.

**MONOS**  
Satisfaction  
Guaranteed

Try **MDA-7 (Y14): sc-80184**, our highly recommended monoclonal alternative to MDA-7 (H-190).