# SANTA CRUZ BIOTECHNOLOGY, INC.

# MLSN1 (E-20): sc-16999



## BACKGROUND

The human melanocyte-specific gene melastatin, initially cloned from the retina, maps to chromosome 15q13.3. Melastatin protein, also designated MLSN1, is a 1,533 amino acid protein that is related to the transient receptor potential (Trp) calcium channel family of proteins, which mediate the transport of cations from the extracellular environment into the cytoplasm. MLSN1 expression is inversely proportional to melanocytic tumor proliferation, suggesting that normal levels of MLSN1 can suppress aggressive malignant melanoma growth. The downregulation of MLSN1 transcripts in malignant melanomas, such as primary cutaneous tumors, is a marker for metastasis and in some cases is independent of tumor thickness.

# REFERENCES

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- Deeds, J., Cronin, F. and Duncan, L.M. 2000. Patterns of melastatin mRNA expression in melanocytic tumors. Hum. Pathol. 31: 1346-1356.
- Fang, D. and Setaluri, V. 2000. Expression and Up-regulation of alternatively spliced transcripts of melastatin, a melanoma metastasis-related gene, in human melanoma cells. Biochem. Biophys. Res. Commun. 279: 53-61.
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- 6. LocusLink Report (LocusID: 4308). http://www.ncbi.nlm.nih.gov/LocusLink/

#### CHROMOSOMAL LOCATION

Genetic locus: MLSN1 (human) mapping to 15q13.3; Mlsn1 (mouse) mapping to 7 C.

#### SOURCE

MLSN1 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MLSN1 of human origin.

# PRODUCT

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

Blocking peptide available for competition studies, sc-16999 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### APPLICATIONS

MLSN1 (E-20) is recommended for detection of MLSN1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MLSN1 (E-20) is also recommended for detection of MLSN1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MLSN1 siRNA (h): sc-43936, MLSN1 siRNA (m): sc-149471, MLSN1 shRNA Plasmid (h): sc-43936-SH, MLSN1 shRNA Plasmid (m): sc-149471-SH, MLSN1 shRNA (h) Lentiviral Particles: sc-43936-V and MLSN1 shRNA (m) Lentiviral Particles: sc-149471-V.

# **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) Immunofluo-rescence: 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.

## **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.

## MONOS Satisfation Guaranteed

Try **MLSN1 (F-3): sc-515228**, our highly recommended monoclonal alternative to MLSN1 (E-20).