

# Melanoma Marker (NKI/C3): sc-52351

## BACKGROUND

Malignant melanoma is a malignant neoplasm of melanocytes, arising *de novo* or from a pre-existing benign nevus, which occurs most often in the skin but may also involve other sites. Malignant melanoma underlies the majority of skin cancer-related deaths. Melanoma originates in melanocytes, the cells which produce the pigment melanin, which colors human skin, hair, and eyes and is heavily concentrated in most moles. Epidemiologic studies suggest that exposure to ultraviolet radiation is one of the major contributors to the development of melanoma. The four most common types of melanoma in the skin are superficial spreading melanomas, which evolve from a precursor lesion (usually a dysplastic nevus); nodular melanomas, the most aggressive form; acral lentiginous melanomas, which are seen on the palms, soles and under the nails; and Lentigo malignas, which consist of malignant cells but do not show invasive growth.

## REFERENCES

1. van Duinen, S.G. et al. 1984. Immunohistochemical and histochemical tools in the diagnosis of amelanotic melanoma. *Cancer* 53: 1566-1573.
2. Bonetti, F., et al. 1989. Breast carcinoma with positive results for melanoma marker (HMB-45). HMB-45 immunoreactivity in normal and neoplastic breast. *Am. J. Clin. Pathol.* 92: 491-495.
3. Lin, C.S. 1990. Melanoma marker and breast carcinoma. *Am. J. Clin. Pathol.* 94: 669-670.
4. Fernando, S.S., et al. 1994. Immunohistochemical analysis of cutaneous malignant melanoma: comparison of S-100 protein, HMB-45 monoclonal antibody and NKI/C3 monoclonal antibody. *Pathology* 26: 16-19.
5. Salazar-Onfray, F., et al. 2002. Tissue distribution and differential expression of melanocortin 1 receptor, a malignant melanoma marker. *Br. J. Cancer* 87: 414-422.
6. Stoitchkov, K., et al. 2003. Evaluation of the serum L-dopa/L-tyrosine ratio as a melanoma marker. *Melanoma Res.* 13: 587-593.

## SOURCE

Melanoma Marker (NKI/C3) is a mouse monoclonal antibody raised against isolated melanoma cells of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Melanoma Marker (NKI/C3) is recommended for detection of Melanoma Marker of 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

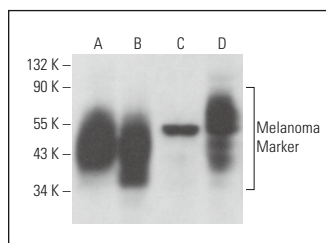
Positive Controls: C32 whole cell lysate: sc-2205, HeLa whole cell lysate: sc-2200 or SK-MEL-24 whole cell lysate: sc-364259.

## RECOMMENDED SUPPORT REAGENTS

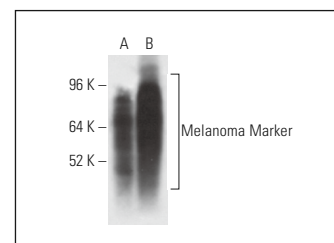
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Melanoma Marker (NKI/C3): sc-52351. Western blot analysis of Melanoma Marker expression in C32 (A), A-375 (B), A549 (C) and HeLa (D) whole cell lysates.



Melanoma Marker (NKI/C3): sc-52351. Western blot analysis of Melanoma Marker expression in C32 (A) and SK-MEL-24 (B) whole cell lysates.

## 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) for detailed protocols and support products.



See **Melanoma Marker (HMB45): sc-59305** for Melanoma Marker antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.