abcam

Product datasheet

Anti-MelanA antibody [EPR20380] ab210546

Recombinant   RabMAb

★★★★★ 11 Abreviews   8 References   9 Images

Overview

Product name	Anti-MelanA antibody [EPR20380]
Description	Rabbit monoclonal [EPR20380] to MelanA
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt, IHC-P, WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human melanoma lysate; B16F0 and MeWo whole cell lysates. IHC-P: Human malignant melanoma and metastatic malignant melanoma tissues; Mouse hair bulb tissue. ICC/IF: MeWo and B16F0 cells. Flow Cyt: B16F0 cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20380

Isotype	IgG

Applications

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/500. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P	★★★★★ (7)	1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/2000. Detects a band of approximately 18 kDa (predicted molecular weight: 13 kDa).
ICC/IF	★★★★★ (1)	1/1000.

Target

|	
Function	Involved in melanosome biogenesis by ensuring the stability of GPR143. Plays a vital role in the expression, stability, trafficking, and processing of melanocyte protein PMEL, which is critical to the formation of stage II melanosomes.
Tissue specificity	Expression is restricted to melanoma and melanocyte cell lines and retina.
Post-translational modifications	Acylated.
Cellular localization	Endoplasmic reticulum membrane. Golgi apparatus. Golgi apparatus > trans-Golgi network membrane. Melanosome. Also found in small vesicles and tubules dispersed over the entire cytoplasm. A small fraction of the protein is inserted into the membrane in an inverted orientation. Inversion of membrane topology results in the relocalization of the protein from a predominant Golgi/post-Golgi area to the endoplasmic reticulum. Melanoma cells expressing the protein with an inverted membrane topology are more effectively recognized by specific cytolytic T-lymphocytes than those expressing the protein in its native membrane orientation.

Images
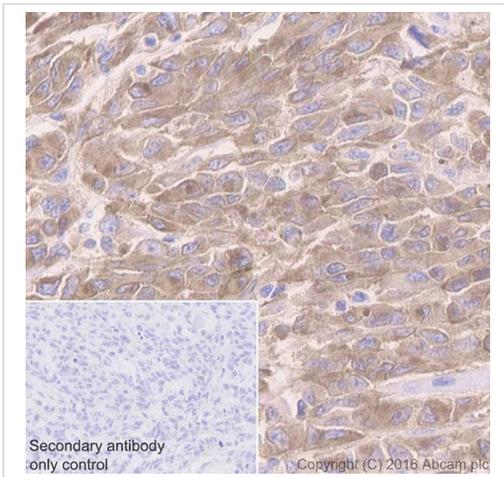
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MelanA antibody [EPR20380] (ab210546)
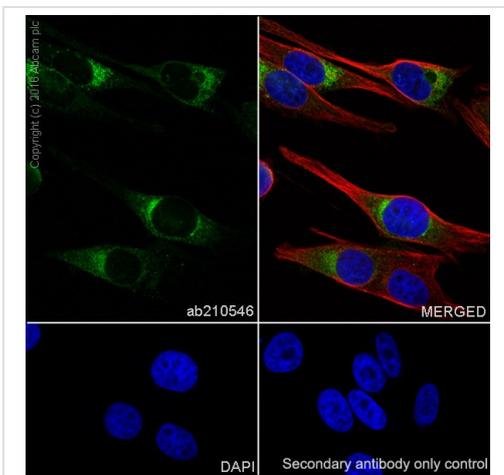
Immunohistochemical analysis of paraffin-embedded human malignant melanoma tissue labeling MelanA with ab210546 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic staining on human malignant melanoma is observed [PMID: 17445277] [PMID: 21840568].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunocytochemistry/ Immunofluorescence - Anti-MelanA antibody [EPR20380] (ab210546)
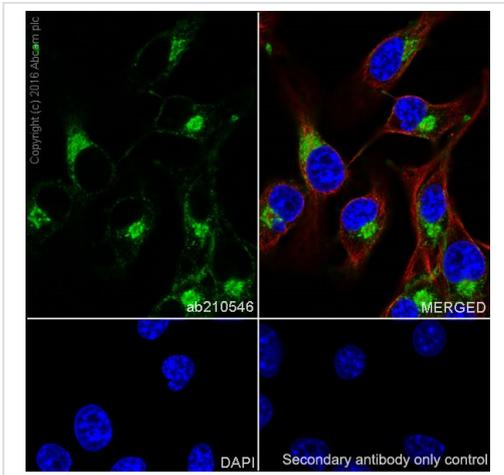
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MeWo (Human malignant melanoma cell line) cells labeling MelanA with ab210546 at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on MeWo cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with ab195889 (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.

Immunocytochemistry/ Immunofluorescence - Anti-MelanA antibody [EPR20380] (ab210546)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized B16F0 (Mouse melanoma cell line) cells labeling MelanA with ab210546 at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on B16F0 cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with ab195889 (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.
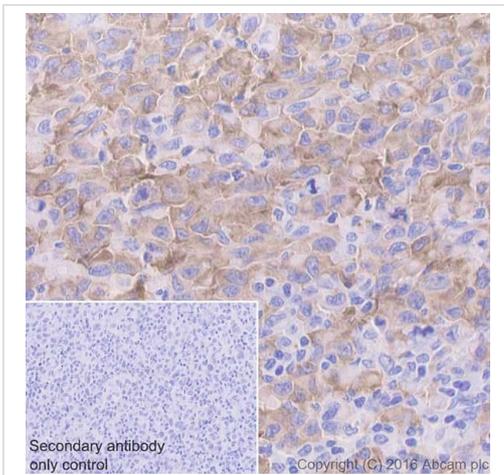
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MelanA antibody [EPR20380] (ab210546)
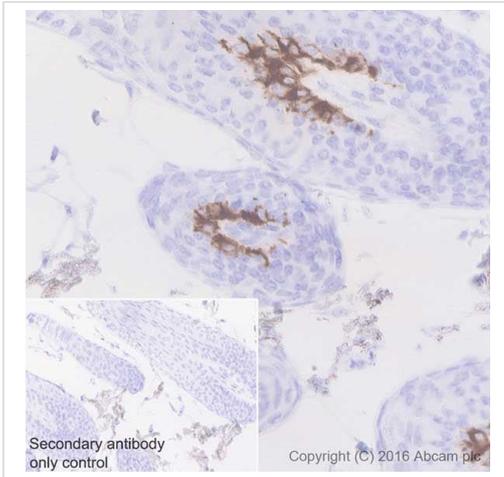
Immunohistochemical analysis of paraffin-embedded human metastatic malignant melanoma tissue labeling MelanA with ab210546 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic staining on human metastatic malignant melanoma is observed [PMID: 17445277] [PMID: 21840568].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MelanA antibody [EPR20380] (ab210546)

Immunohistochemical analysis of paraffin-embedded mouse hair bulb tissue labeling MelanA with ab210546 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic staining on melanocytes of mouse hair bulb is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
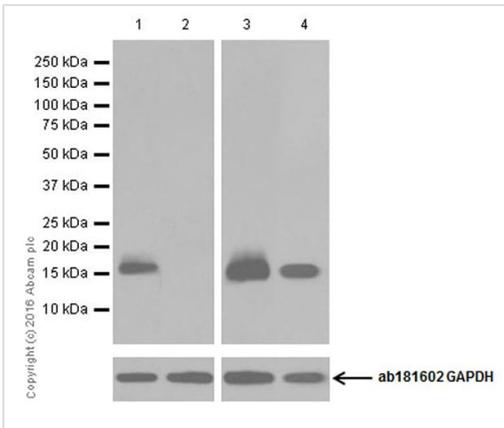
Western blot - Anti-MelanA antibody [EPR20380] (ab210546)

All lanes : Anti-MelanA antibody [EPR20380] (ab210546) at 1/2000 dilution

Lane 1 : Human melanoma lysate

Lane 2 : A-375 (Human malignant melanoma cell line) whole cell lysate

Lane 3 : B16F0 (Mouse melanoma cell line) whole cell lysate

Lane 4 : MeWo (Human malignant melanoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

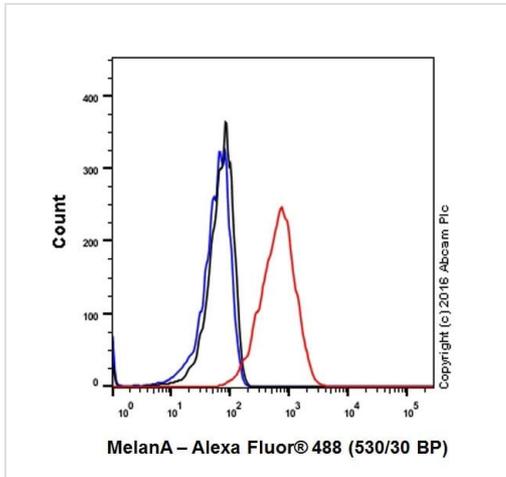**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 13 kDa

Observed band size: 18 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1 and 2: 10 seconds; Lane 3 and 4: 3 seconds.

A-375 doesn't express MelanA. The expression profile observed is consistent with what has been described in the literature (PMID: 12670905).

Flow Cytometry (Intracellular) - Anti-MelanA antibody [EPR20380] (ab210546)

Flow cytometric analysis of 4% paraformaldehyde-fixed B16F0 (Mouse melanoma cell line) cells labeling MelanA with ab210546 at 1/500 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.
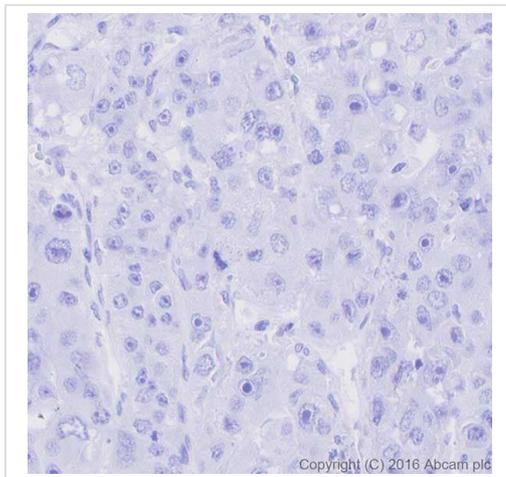
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MelanA antibody [EPR20380] (ab210546)

Immunohistochemical analysis of paraffin-embedded human liver cancer tissue labeling MelanA with ab210546 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Negative control: no staining on human liver cancer [PMID: 10096358].

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Why choose a recombinant antibody?
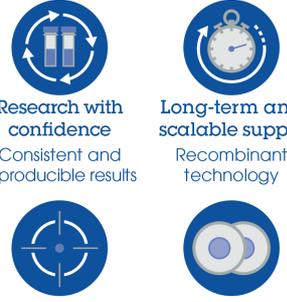
Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-MelanA antibody [EPR20380] (ab210546)

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