

Anti-MelanA antibody [EP1422Y] - BSA and Azide free

Recombinant

RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EP1422Y
Purification technique	Affinity purification Protein A
Dissociation constant	1.27 x 10 ⁻⁹ M
Concentration	1.026 - 1.047 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested	
Species	Human

Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Target data

[See full target information MLANA](#) 

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.
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Storage

Shipped at conditions	Blue Ice
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Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab271839 is the carrier-free version of ab51061.

Species reactivity

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Patented technology

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.

What are the advantages of a recombinant monoclonal antibody?

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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

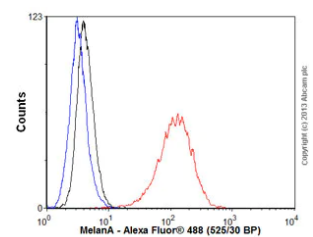
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

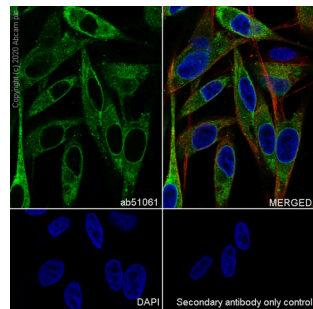
8 product images



Flow Cytometry (Intracellular) - Anti-MelanA antibody [EP1422Y] - BSA and Azide free (ab271839)

MelanA Flow Cytometry (Intracellular) staining using rabbit Anti-MelanA antibody

Overlay histogram showing Malme-3M cells stained with [ab51061](#) (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody ([ab51061](#), 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) ([ab150077](#)) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab51061](#)).



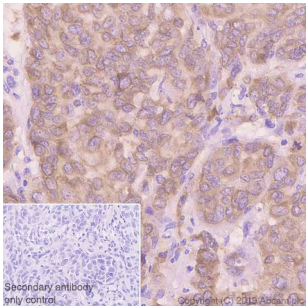
Immunocytochemistry/ Immunofluorescence - Anti-MelanA antibody [EP1422Y] - BSA and Azide free (ab271839)

MelanA Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-MelanA antibody

Immunocytochemistry/ Immunofluorescence analysis of MeWo (Human malignant melanoma fibroblast) cells labeling MelanA with Purified [ab51061](#) at 1/100 dilution (10 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with [ab195889](#) Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

MelanA Flow Cytometry (Intracellular) staining using rabbit Anti-MelanA antibody

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab51061](#)).



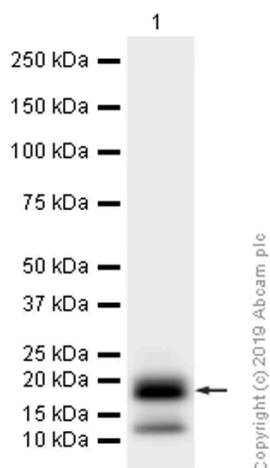
MelanA Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MelanA antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human melanoma tissue sections labeling MelanA with purified [ab51061](#) at 1/1000 dilution (1.15 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab51061](#)).

Basic Microarray (PDA) data for GSE16561					
Normal breast samples			Malignant breast samples		
Human cardiac muscle	Human placenta	×	Human placenta	×	Human placenta
Human cardiac muscle	Human skeletal muscle	×	Human skeletal muscle	×	Human skeletal muscle
Human colon	Human skin	✓ (transcriptome)	Human esophageal cancer	×	Human esophageal cancer
Human endometrium	Human spleen	×	Human breast cancer	×	Human pancreatic cancer
Human kidney	Human thymus	×	Human cervical cancer	×	Human glioblastoma
Human liver	Human testis	×	Human colon carcinoma	×	Human fibroblast
Human lung	Human thyroid	×	Human esophageal carcinoma	×	Malignant melanoma
Human mammary gland	Human tonsil	×	Human gastric adenocarcinoma	×	
Human prostate		×			

MelanA Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MelanA antibody

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab51061](#)).



Western blot - Anti-MelanA antibody [EP1422Y] - BSA and Azide free (ab271839)

MelanA Western blot staining of Human melanoma lysates using rabbit Anti-MelanA antibody

Blocking/Diluting buffer: 5% NFDM/TBST

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab51061](#)).

All lanes:

Western blot - Anti-MelanA antibody [EP1422Y] ([ab51061](#)) at 1/20000 dilution

All lanes:

Human melanoma lysates at 15 µg

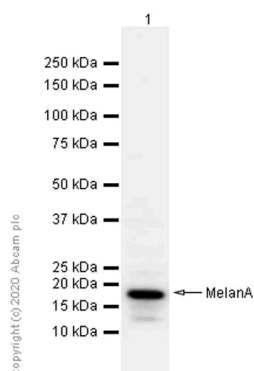
Secondary

All lanes:

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 13 kDa

Observed band size: 20 kDa



Western blot - Anti-MelanA antibody [EP1422Y] - BSA and Azide free (ab271839)

MelanA Western blot staining of MeWo (Human malignant melanoma fibroblast) whole cell lysate using rabbit Anti-MelanA antibody

Blocking buffer: 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab51061](#)).

All lanes:

Western blot - Anti-MelanA antibody [EP1422Y] ([ab51061](#)) at 1/20000 dilution

All lanes:

MeWo (Human malignant melanoma fibroblast) whole cell lysate at 15 µg

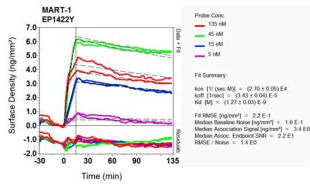
Secondary

All lanes:

Western blot - Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 13 kDa

Observed band size: 20 kDa



OI-RD Scanning - Anti-MelanA antibody [EP1422Y] - BSA and Azide free (ab271839)

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.