# abcam

### **Product datasheet**

## Anti-MelanA antibody [EP1422Y] ab51061

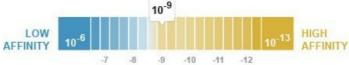
אילארבע RabMAb

★★★★★ 1 Abreviews 27 References 画像数 9

#### 製品の概要

製品名	Anti-MelanA antibody [EP1422Y]
製品の詳細	Rabbit monoclonal [EP1422Y] to MelanA
由来種	Rabbit
アプリケーション	適用あり: Flow Cyt (Intra), WB, IHC-P, ICC/IF
種交差性	交差種: Human
免疫原	Synthetic peptide within Human MelanA aa 1-100 (N terminal). The exact sequence is proprietary. Database link: <b>Q16655</b>
ポジティブ・コントロール	WB: Human melanoma lysates. IHC-P: Human melanoma tissue. Flow Cyt (intra): A375 and Malme-3M cells. ICC/IF: MeWo cells.
特記事項	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 $^{ extsf{B}}$ technology is a patented hybridoma-based technology for making rabbit
	monoclonal antibodies. For details on our patents, please refer to <b><u>RabMAb<sup>®</sup> patents</u></b> .
	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

製品の特性	
製品の状態	Liquid
保存方法	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.
解離定数(K <sub>D</sub> 値)	$K_{D} = 1.27 \times 10^{-9} M$



#### Learn more about K<sub>D</sub>

バッファー	pH: 7.2
	Preservative: 0.01% Sodium azide
	Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP1422Y
アイソタイプ	lgG

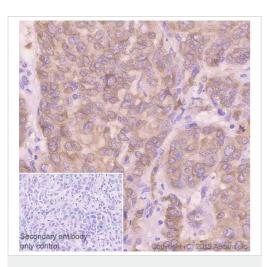
アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab51061の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

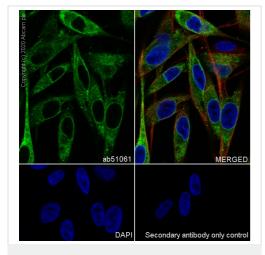
アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/1000. <u>ab172730</u> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/20000. Detects a band of approximately 20 kDa (predicted molecular weight: 13 kDa).
IHC-P		<ul> <li>1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</li> <li>See <u>IHC antigen retrieval protocols</u>.</li> <li>The immunostaining was performed on a Leica Biosystems BOND® RX instrument.</li> </ul>
ICC/IF		1/100.

#### ターゲット情報

機能	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.
組織特異性	Expression is restricted to melanoma and melanocyte cell lines and retina.
翻訳後修飾	Acylated.
細胞内局在	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.

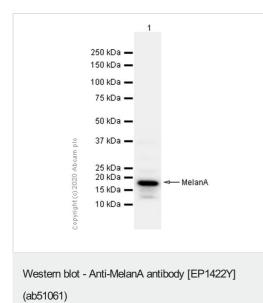


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MelanA antibody [EP1422Y] (ab51061) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human melanoma tissue sections labeling MelanA with purified ab51061 at 1/1000 dilution (1.15 µg/mL). Heat mediated 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.



Immunocytochemistry/ Immunofluorescence - Anti-MelanA antibody [EP1422Y] (ab51061)

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.



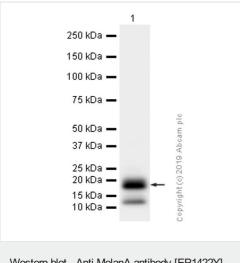
Anti-MelanA antibody [EP1422Y] (ab51061) at 1/20000 dilution + MeWo (Human malignant melanoma fibroblast) whole cell lysate at 15  $\mu$ g

#### Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 13 kDa Observed band size: 20 kDa

Blocking buffer: 5% NFDM/TBST.



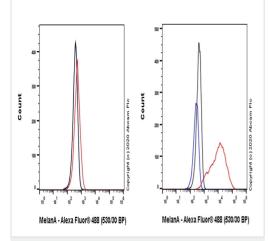
Western blot - Anti-MelanA antibody [EP1422Y] (ab51061) Anti-MelanA antibody [EP1422Y] (ab51061) at 1/20000 dilution (Purified) + Human melanoma lysates at 15 µg

#### Secondary

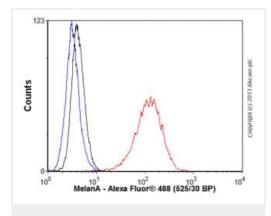
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 13 kDa Observed band size: 20 kDa

Blocking/Diluting buffer: 5% NFDM/TBST



Flow Cytometry (Intracellular) - Anti-MelanA antibody [EP1422Y] (ab51061) Intracellular Flow Cytometry analysis of A375 (Human malignant melanoma epithelial cell, Left) / MeWo (Human malignant melanoma fibroblast, Right) cells labeling MelanA with Purified ab51061 at 1/1000 dilution (1 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, <u>ab150077</u>) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



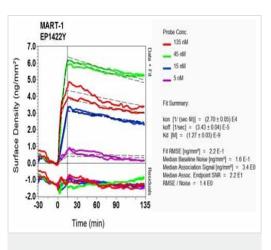
Flow Cytometry (Intracellular) - Anti-MelanA antibody [EP1422Y] (ab51061) Overlay histogram showing Malme-3M cells stained with ab51061 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal 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<sup>®</sup> 488 goat anti-rabbit IgG (H+L) (<u>ab150077</u>) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) ( $0.1\mu g/1x10^6$  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 image was generated using the un-purified format of the antibody.



Learn more about K<sub>D</sub>

Click here to learn more about KD



OI-RD Scanning - Anti-MelanA antibody [EP1422Y] (ab51061)

Normal fissue samples			Malignant tissue samples				
Human cardiac muscle	x	Human placenta	x	Clear cell carcinoma of human kidney	×	Human hepatocellular carcinoma	x
Human cerebrum	x	Human skeletal muscle	x	Human astrocytoma	x	Human lung carcinoma	x
Human colon	×	Human skin	🗸 (chromocyte)	Human bladder cancer	×	Human ovarian carcinoma	×
Human endometrium	×	Human spleen	×	Human breast carcinoma	×	Human pancreatic carcinoma	x
Human kidney	x	Human stomach	x	Human cervical carcinoma	x	Human prostatic hyperplasia	x
Human liver	x	Human testis	×	Human colon carcinoma	×	Human thyroid carcinoma	x
Human lung	x	Human thyroid	×	Human endometrial carcinoma	×	Malignant melanoma	1
łuman mammory gland	x	Human tonsil	x	Human gastric adenocarcinoma	x		
Human pancreas	x						

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MelanA antibody [EP1422Y] (ab51061)



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Tissue Microarrays stained for "Anti-MelanA antibody [EP1422Y]" using "ab51061" in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were pre-treated using Heat mediated antigen retrieval using Bond<sup>™</sup> Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes. The sections were incubated with ab51061 for 30 mins at room temperature followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument.

#### Terms and conditions

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