

Product datasheet

Anti-TRP2/DCT antibody [EPR21986] ab221144

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [13 References](#) [7 Images](#)

Overview

Product name	Anti-TRP2/DCT antibody [EPR21986]
Description	Rabbit monoclonal [EPR21986] to TRP2/DCT
Host species	Rabbit
Specificity	Mouse species is recommended based on WB and IP results, we do not guarantee IHC-P for mouse.
Tested applications	Suitable for: mIHC, WB, IHC-P, IP
Species reactivity	Reacts with: Mouse, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: MeWo, SK-MEL-2, SK-MEL-28 and F9 whole cell lysates. IHC-P: Human skin and melanoma tissues. IP: SK-MEL-2 and B16-F0 whole cell lysates. mIHC: Human skin (melanocytes).
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol, 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR21986
Isotype	IgG

Applications

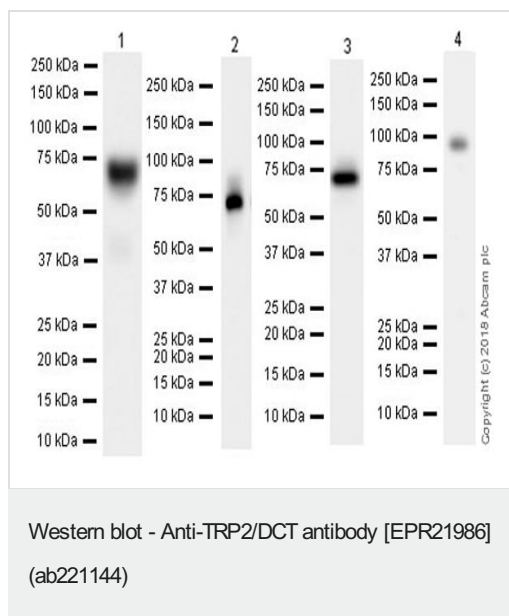
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab221144 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
mlHC		1/3000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Detects a band of approximately 69, 85 kDa (predicted molecular weight: 59 kDa).
IHC-P	★★★★★ (1)	1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Mouse species is recommended based on WB and IP results, we do not guarantee IHC-P for mouse.
IP		1/30.

Target

Function	Involved in regulating eumelanin and phaeomelanin levels.
Pathway	Pigment biosynthesis; melanin biosynthesis.
Sequence similarities	Belongs to the tyrosinase family.
Cellular localization	Melanosome membrane.

Images



All lanes : Anti-TRP2/DCT antibody [EPR21986] (ab221144) at 1/1000 dilution

Lane 1 : MeWo (human malignant melanoma cell line) whole cell lysate

Lane 2 : SK-MEL-2 (human skin malignant melanoma cell line) whole cell lysate

Lane 3 : SK-MEL-28 (human malignant melanoma cell line) whole cell lysate

Lane 4 : F9 (mouse embryonic testicular cancer cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

Lane 1 : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Lanes 2-4 : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

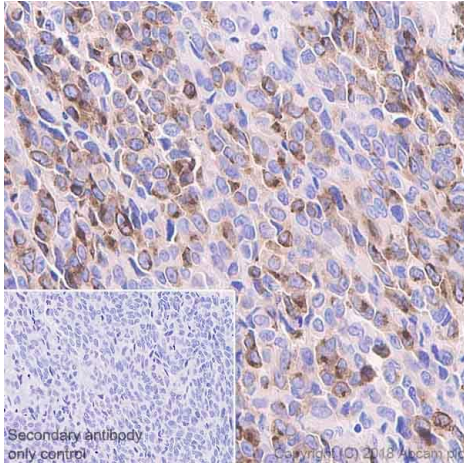
Predicted band size: 59 kDa

Observed band size: 69,85 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time : Lane 1: 5 seconds; Lane 2: 15 seconds; Lane 3: 26 seconds; Lane 4: 3 minutes.

The molecular mass observed is consistent with what has been described in the literature (PMID: 12719423, PMID: 25009701)

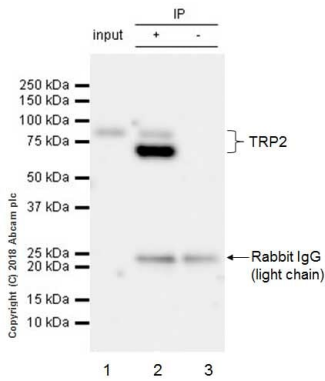


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRP2/DCT antibody [EPR21986] (ab221144)

Immunohistochemical analysis of paraffin-embedded human melanoma tissue labeling TRP2/DCT with ab221144 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in human melanoma (PMID: 24475287). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

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



Immunoprecipitation - Anti-TRP2/DCT antibody [EPR21986] (ab221144)

TRP2/DCT was immunoprecipitated from 0.35 mg B16-F0 (mouse melanoma epithelial cell-like cell line) whole cell lysate with ab221144 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab221144 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/5000 dilution.

Lane 1: B16-F0 whole cell lysate 10 µg (Input).

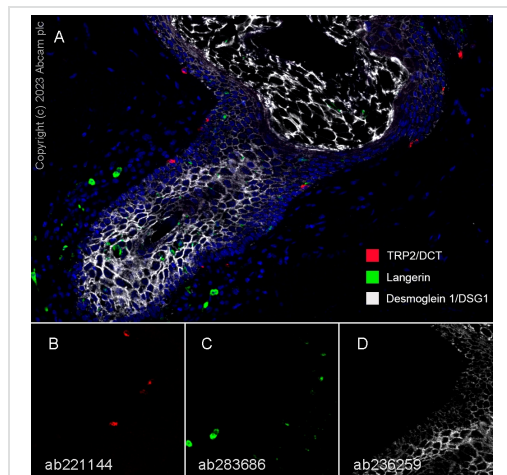
Lane 2: ab221144 IP in B16-F0 whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab221144 in B16-F0 whole cell lysate.

Blocking/Dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 41 seconds.

~85KD band is the glycosylated form (PMID: 12719423)



Multiplex immunohistochemistry - Anti-TRP2/DCT antibody [EPR21986] (ab221144)

Panel A: merged staining of anti-Desmoglein 1/DSG1 (gray; Opal™690), anti-Langerin (green; Opal™520) and anti-TRP2/DCT (red; Opal™570) on human skin.

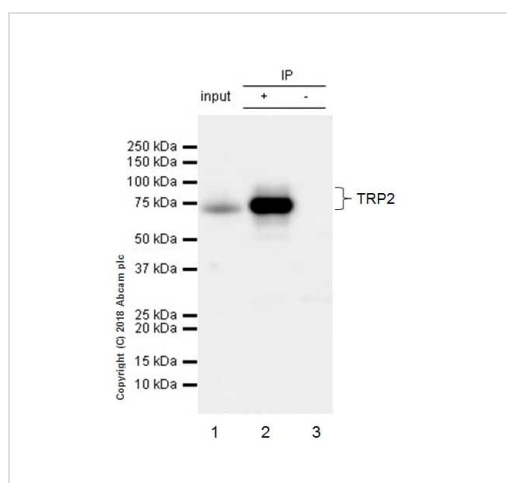
Panel B: anti-TRP2/DCT stained on melanocytes.

Panel C: anti-Langerin stained on Langerhans cells.

Panel D: anti-Desmoglein 1/DSG1 stained on epidermis.

The section was incubated in three rounds of staining: in the order of **ab236259**, **ab283686**, and ab221144 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.



Immunoprecipitation - Anti-TRP2/DCT antibody [EPR21986] (ab221144)

TRP2/DCT was immunoprecipitated from 0.35 mg SK-MEL-2 (human skin malignant melanoma cell line) whole cell lysate with ab221144 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab221144 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/5000 dilution.

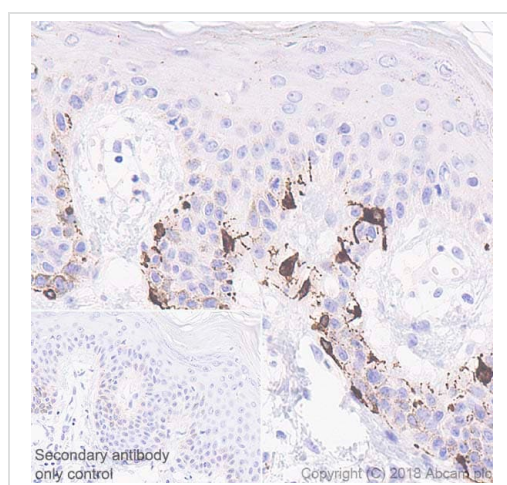
Lane 1: SK-MEL-2 whole cell lysate 10 µg (Input).

Lane 2: ab221144 IP in SK-MEL-2 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab221144 in SK-MEL-2 whole cell lysate.

Blocking/Dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 5 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRP2/DCT antibody [EPR21986] (ab221144)

Immunohistochemical analysis of paraffin-embedded human skin tissue labeling TRP2/DCT with ab221144 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in melanocytes of human skin (PMID:12535195). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

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-TRP2/DCT antibody [EPR21986] (ab221144)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors