# abcam

## Product datasheet

## Anti-Tyrosinase antibody [EPR10141] ab170905



重组 RabMAb

★★★★★ 1 Abreviews 20 References 8 图像

概述

产品名称 Anti-Tyrosinase抗体[EPR10141]

描述 兔单克隆抗体[EPR10141] to Tyrosinase

宿主 Rabbit

特异性 This antibody does not react with mouse species in Immunohistochemistry (Formalin/PFA-fixed

paraffin-embedded sections) application.

经测试应用 适用于: IHC-P, WB, ICC/IF, Flow Cyt (Intra)

不适用于: IP

种属反应性 与反应: Mouse, Human

免疫原 Recombinant fragment within Human Tyrosinase. The exact sequence is proprietary.

Database link: P14679

阳性对照 WB: Human melanoma lysate, SK-MEL-28. MeWo, B16-F0 and B16-F10 whole cell lysates. IHC-

P: Human melanoma and skin tissue. ICC/IF: A375 cells. Flow Cyt (Intra): A375 cells.

常规说明 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**.

性能

形式 Liquid

存放说明 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.

存储溶液 pH: 7.20

Constituents: 0.35% Sodium citrate, 0.17% Sodium chloride, 0.03% EDTA, 59% PBS, 40%

Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

**克隆** 单克隆

**克隆编号** EPR10141

**同种型** IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab170905于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	*** <u>*</u> (1)	1/1000 - 1/5000. Predicted molecular weight: 60 kDa.
ICC/IF		1/50 - 1/100.
Flow Cyt (Intra)		1/30.

应用说明

Is unsuitable for IP.

#### 靶标

功能

This is a copper-containing oxidase that functions in the formation of pigments such as melanins and other polyphenolic compounds. Catalyzes the rate-limiting conversions of tyrosine to DOPA, DOPA to DOPA-quinone and possibly 5,6-dihydroxyindole to indole-5,6 quinone.

疾病相关

Defects in TYR are the cause of albinism oculocutaneous type 1A (OCA1A) [MIM:203100]; also known as tyrosinase negative oculocutaneous albinism. An autosomal recessive disorder in which the biosynthesis of melanin pigment is absent in skin, hair, and eyes. It is characterized by complete lack of tyrosinase activity due to production of an inactive enzyme. Patients present with a life-long absence of melanin pigment after birth, and manifest increased sensitivity to ultraviolet radiation with predisposition to skin cancer. Visual anomalies include decreased acuity, nystagmus, strabismus and photophobia.

Defects in TYR are the cause of albinism oculocutaneous type 1B (OCA1B) [MIM:606952]; also known as albinism yellow mutant type. An autosomal recessive disorder in which the biosynthesis of melanin pigment is reduced in skin, hair, and eyes. It is characterized by partial lack of tyrosinase activity. Patients have white hair at birth that rapidly turns yellow or blond. They manifest the development of minimal-to-moderate amounts of cutaneous and ocular pigment. Some patients may have with white hair in the warmer areas (scalp and axilla) and progressively darker hair in the cooler areas (extremities). This variant phenotype is due to a loss of tyrosinase activity above 35-37 degrees C.

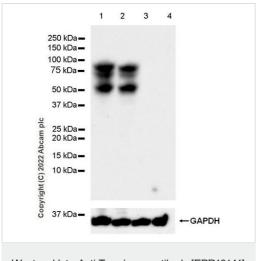
序列相似性

Belongs to the tyrosinase family.

细胞定位

Melanosome membrane.

## 图片



Western blot - Anti-Tyrosinase antibody [EPR10141] (ab170905)

**All lanes :** Anti-Tyrosinase antibody [EPR10141] (ab170905) at 1/1000 dilution

Lane 1 : B16-F0 (mouse melanoma epithelial-like cell), whole cell lysate

Lane 2 : B16-F10 (mouse melanoma epithelial-like cell), whole cell lysate

Lane 3: NIH/3T3 (mouse embryonic fibroblast), whole cell lysate
Lane 4: RAW264.7 (mouse Abelson murine leukemia virus-

induced tumor macrophage), whole cell lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

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

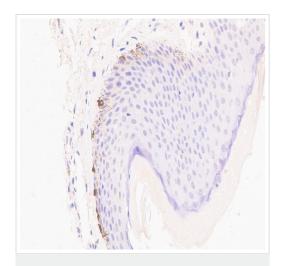
Predicted band size: 60 kDa

Observed band size: 50-80 kDa

Exposure time: 59 seconds

**Blocking buffer and concentration:** 5% NFDM/TBST **Diluting buffer and concentration:** 5% NFDM/TBST

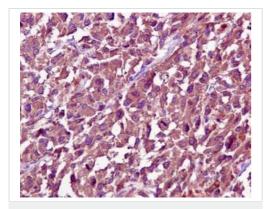
The expression profile observed is consistent with what has been described in the literature (PMID: 20053998; PMID: 24933607). **Negative control:** NIH/3T3, RAW264.7 whole cell lysates.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Tyrosinase antibody
[EPR10141] (ab170905)

Immunohistochemical analysis of paraffin-embedded human skin tissue labelling Tyrosinase with ab170905 at 1/500 (0.662 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond  $^{\rm TM}$  Polymer Refine Detection). Positive staining on human skin. The section was incubated with ab170905 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND  $^{\rm I\!R}$  RX instrument. Counterstained with hematoxylin.

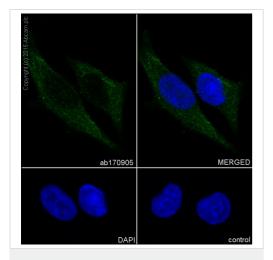
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Tyrosinase antibody
[EPR10141] (ab170905)

Immunohistochemical analysis of paraffin-embedded Human melanoma tissue, labeling Tyrosinase using ab170905 at a 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Tyrosinase antibody [EPR10141] (ab170905)

ab170905 staining Tyrosinase in A375 (human malignant melanoma) cells by ICC/IF

(Immunocytochemistry/immunofluorescence). Cells were fixed with 100% methanol and incubated with primary antibody at a dilution of 1/500. A goat anti rabbit lgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a dilution of 1/1000. DAPI was used as a nuclear counterstain.

Control: PBS only.



Western blot - Anti-Tyrosinase antibody [EPR10141] (ab170905)

**All lanes :** Anti-Tyrosinase antibody [EPR10141] (ab170905) at 1/1000 dilution

**Lane 1 :** SK-MEL-28 (Human malignant melanoma) whole cell lysate

Lane 2 : MeWo (Human malignant melanoma fibroblast) whole cell

Lysates/proteins at 15 µg per lane.

#### Secondary

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

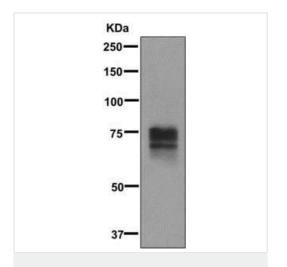
**Predicted band size:** 60 kDa **Observed band size:** 70 kDa

Blocking buffer: 5% NFDM/TBST.

#### **Exposure:**

Lane 1: 20 seconds

Lane 2: 60 seconds



Western blot - Anti-Tyrosinase antibody [EPR10141] (ab170905)

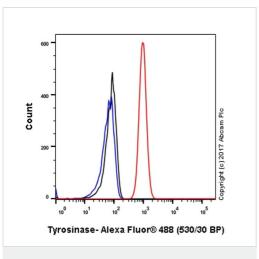
Anti-Tyrosinase antibody [EPR10141] (ab170905) at 1/1000 dilution + Human melanoma lysate at  $10~\mu g$ 

#### **Secondary**

Goat anti-rabbit HRP at 1/2000 dilution

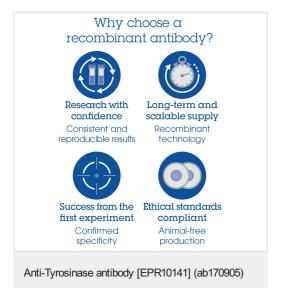
Developed using the ECL technique.

Predicted band size: 60 kDa



Flow Cytometry (Intracellular) - Anti-Tyrosinase antibody [EPR10141] (ab170905)

Intracellular Flow Cytometry analysis of A375 (human malignant melanoma) cells labeling with purified ab170905 at 1/30 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488) (ab150077) (1/2000 dilution) was used as the secondary antibody. Cells without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.



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 <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

### Terms and conditions

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