# abcam

# Product datasheet

# Anti-Tyrosinase antibody [SPM360], prediluted ab54447

## 1 Abreviews 2 References 1 Image

#### Overview

Product name Anti-Tyrosinase antibody [SPM360], prediluted

**Description** Mouse monoclonal [SPM360] to Tyrosinase, prediluted

Host species Mouse

**Tested applications** Suitable for: IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Cat, Dog

**Immunogen** Recombinant Human Tyrosinase

**Epitope** ab54447 reacts with an epitope located in the region encoded by amino acids 1-433.

**Positive control**Melanoma cell lines and Melanoma tissue.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C.

Storage buffer pH: 7.2

Preservative: 0.1% Sodium azide Constituents: BSA, 0.0268% PBS

Purity Protein A purified

ClonalityMonoclonalClone numberSPM360

**Isotype** IgG2a

1

#### **Applications**

#### The Abpromise guarantee

Our Abpromise quarantee covers the use of ab54447 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 |
|-------------|-----------|-------|
| IHC-P       |           |       |

#### **Application notes**

IHC-P: Ready-to-use for 30 min at RT.

Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0

for 10 min followed by cooling at RT for 20 min.

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

#### **Target**

#### **Function**

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.

#### Involvement in disease

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.

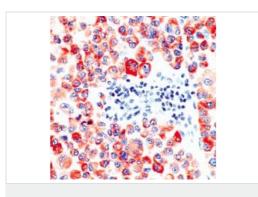
#### Sequence similarities

Belongs to the tyrosinase family.

#### **Cellular localization**

Melanosome membrane.

# **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Tyrosinase antibody [SPM360], prediluted (ab54447)

Ab54447 staining human Tyrosinase in human melanoma tissue by immunohistochemistry using formalin fixed, paraffin embedded tissue.

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

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