abcam

Product datasheet

Recombinant Human Tyrosinase protein (Tagged) ab152776

1 Image

Description

Product name Recombinant Human Tyrosinase protein (Tagged)

Expression system Wheat germ Accession P14679-2

Protein length Full length protein

Animal free No.

Nature Recombinant

Species Human

Sequence MLLAVLYCLLWSFQTSAGHFPRACVSSKNLMEKECCPP

WSGDRSPCGQLS

GRGSCQNILLSNAPLGPQFPFTGVDDRESWPSVFYNRTC

QCSGNFMGFNC

GNCKFGFWGPNCTERRLLVRRNIFDLSAPEKDKFFAYLTL

AKHTISSDYV

IPIGTYGQMKNGSTPMFNDINIYDLFVWMHYYVSMDALLGG

SEIWRDIDF

AHEAPAFLPWHRLFLLRWEQEIQKLTGDENFTIPYWDWR

DAEKCDICTDE

YMGGQHPTNPNLLSPASFFSSWQIVCSRLEEYNSHQPLC

NGTPEGPLRRN

PGNHDKSRTPRLPSSADVEFCLSLTQYESGSMDKAANFS FRNTLEEMGFL HVGWAGLKLLTSRDPPPWPPKMLGLQA

Predicted molecular weight 67 kDa including tags

Amino acids 1 to 377

Tags GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab152776** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Western blot

SDS-PAGE

1

ELISA

Form

Liquid

Preparation and Storage

Stability and Storage

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

General Info

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.

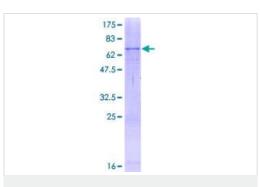
Sequence similarities

Belongs to the tyrosinase family.

Cellular localization

Melanosome membrane.

Images



SDS-PAGE - Recombinant Human Tyrosinase protein (Tagged) (ab152776)

12.5% SDS-PAGE analysis of ab152776 stained with Coomassie Blue.

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