

TYR Protein, Human (P.pastoris, His)

Cat. No.:	HY-P71792
Synonyms:	ATN; CMM8; LB24 AB; LB24-AB; OCA1; OCA1A; OCA1A; Oculocutaneous albinism IA; SHEP3; SK29 AB; SK29-AB; Tumor rejection antigen AB; TYR; Tyrosinase
Species:	Human
Source:	P. pastoris
Accession:	P14679 (19H-377V)
Gene ID:	7299
Molecular Weight:	Approximately 48 kDa

PROPERTIES

AA Sequence

H F P R A C V S S K	N L M E K E C C P P	W S G D R S P C G Q	L S G R G S C Q N I
L L S N A P L G P Q	F P F T G V D D R E	S W P S V F Y N R T	C Q C S G N F M G F
N C G N C K F G F W	G P N C T E R R L L	V R R N I F D L S A	P E K D K F F A Y L
T L A K H T I S S D	Y V I P I G T Y G Q	M K N G S T P M F N	D I N I Y D L F V W
M H Y Y V S M D A L	L G G S E I W R D I	D F A H E A P A F L	P W H R L F L L R W
E Q E I Q K L T G D	E N F T I P Y W D W	R D A E K C D I C T	D E Y M G G Q H P T
N P N L L S P A S F	F S S W Q I V C S R	L E E Y N S H Q S L	C N G T P E G P L R
R N P G N H D K S R	T P R L P S S A D V	E F C L S L T Q Y E	S G S M D K A A N F
S F R N T L E G F A	S P L T G I A D A S	Q S S M H N A L H I	Y M N G T M S Q V

Biological Activity

The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

Appearance

Lyophilized powder.

Formulation

Lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconstitution

It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH₂O.

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

TYR protein is a copper-containing oxidase crucial for pigment formation, playing a pivotal role in the synthesis of melanins and various polyphenolic compounds. Acting as the initiator of the melanin production pathway from tyrosine, TYR

catalyzes the initial and rate-limiting step, hydroxylating tyrosine to DOPA (3,4-dihydroxyphenylalanine). Furthermore, it facilitates the oxidation of DOPA to DOPA-quinone and potentially mediates the oxidation of DHI (5,6-dihydroxyindole) to indole-5,6 quinone, contributing to the complex cascade of reactions involved in melanin biosynthesis.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA