

Recombinant human DCT protein

Catalog Number: ATGP3454

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

24-472aa

UniProt No.

P40126

NCBI Accession No.

NP_001913

Alternative Names

L-dopachrome tautomerase isoform 1, DCT, TRP-2, TYRP2

PRODUCT SPECIFICATION

Molecular Weight

52.1 kDa (455aa)

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

DCT, as known as L-dopachrome tautomerase isoform 1, is the tyrosinase family members. This protein plays a key role in the synthesis of the melanin pigment including tyrosinase (Tyr), tyrosinase-related protein 1 (Tyrp1). These are strongly implicated in eumelanin synthesis. The switch between the eumelanin and the pheomelanin pathways is thought to depend on the presence of cysteine. Thus, in the absence of cysteine, dopaquinone, the

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product of tyrosinase action, is transformed to cyclodopa (leucodopachrome) and then to dopachrome (and DOPA). Recombinant human DCT, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

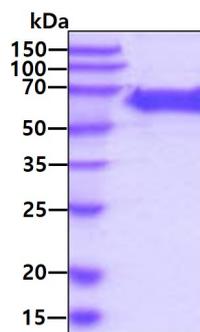
QFPRVCMTVD SLVNKECCPR LGAESANVCG SQQGRGQCTE VRADTRPWSG PYILRNQDDR ELWPRKFFHR
TCKCTGNFAG YNCGDCKFGW TGPNCERKKP PVIRQNIHSL SPQEREQFLG ALDLAKKRVH PDYVITTQHW LGLLGPNGTQ
PQFANCSVYD FFVWLHYYSV RDTELLGGRP YRAIDFSHQG PAFVTWHRYH LLCLERDLQR LIGNESFALP YWNFATGRNE
CDVCTDQLFG AARPDDPTLI SRNSRFSSWE TVCDLDDYN HLVTLNNGTY EGLLRNQMGM RNSMKLPTLK DIRDCLSLQK
FDNPPFFQNS TFSFRNALEG FDKADGTLDS QVMSLHNLVH SFLNGTNALP HSAANDPIFV VLHSFTDAIF DEWMKRFNPP
ADAWPQELAP IGHNRMYNMV PFFPPVTNEE LFLTSDQLGY SYAIDLPSV EETPGWPTT<H HHHHH>

General References

Ainger SA., et al, (2014) *Exp. Dermatol.* 23:916-921.
Guyonneau L., et al, (2004) *Mol. Cell. Biol.* 8:3396-3403.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.