

Recombinant human QDPR protein

Catalog Number: ATGP1172

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-244aa

UniProt No.

P09417

NCBI Accession No.

NP_000311

Alternative Names

Quinoid dihydropteridine reductase., DHPR, FLJ42391, PKu2, SDR33C1

PRODUCT SPECIFICATION

Molecular Weight

28.2 kDa (267aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

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

Purity

> 90% by SDS-PAGE

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

QDPR is a member of the short-chain dehydrogenases/reductase (SDR) family of enzymes. Functioning as a homodimer, QDPR plays an important role in the recycling of tetrahydrobiopterin (BH4), an essential cofactor for the hydroxylation of the aromatic amino acids (tryptophan, tyrosine and phenylalanine). More specifically, QDPR catalyzes the regeneration of BH4 from quinonoid dihydrobiopterin (qBH2), the product generated from the hydroxylation reactions. Mutations in the gene encoding QDPR can lead to phenylketonuria II. Recombinant human QDPR protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional

Recombinant human QDPR protein

Catalog Number: ATGP1172

chromatography techniques.

Amino acid Sequence

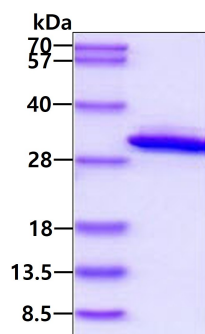
<MGSSHHHHHH SSGLVPRGSH MGS>MAAAAAA GEARRVLVYG GRGALGSRV QAFRARNWWW ASVDVVENEE
ASASIVKMT DSFTEQADQV TAEVGKLLGE EKVDAILCVA GGWAGGNAKS KSLFKNCDLM WKQSIWTSTI SSSLATKHLK
EGLLTLAGA KAALDGTPGM IGYGMAKGAV HQLCQSLAGK NSGMPPGAAA IAVLPVTLDT PMNRKSMPEA DFSSWTPLEF
LVETFHDWIT GKNRPSSGSL IQVVTTEGRT ELTPAYF

General References

Lye LF., et al. (2002) J Biol Chem. 277(41):38245-53.
Kalkanoğlu HS., et al. (2001) Prenat Diagn. 21(10):868-70.

DATA

SDS-PAGE



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