

QDPR, Human Recombinant

CATALOG #:	7821-100	100 µg
ALTERNATE NAMES:	Quinoid dihydropteridine reductase, DHPR, FLJ42391, PKU2, SDR33C1.	
SOURCE:	<i>E. coli</i>	
PURITY:	> 90% by SDS - PAGE	
MOL. WEIGHT:	28.2 kDa (267 aa, 1-244 aa + His Tag)	
FORM:	Liquid	
FORMULATION:	0.2 µm filtered solution. In 20 mM Tris-HCl buffer (pH 8.5) containing 10% glycerol, 0.1 M NaCl, 2 mM DTT	

STORAGE CONDITIONS:

Can be stored at 4 °C short term (1-2 weeks). For long term storage, divide into aliquots and store at -20 °C or -70 °C. Avoid repeated freezing and thawing cycles.

DESCRIPTION:

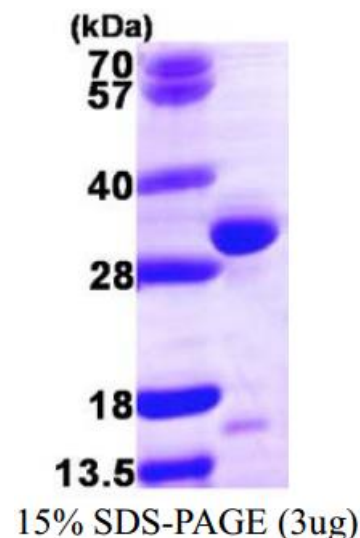
QDPR is a member of the short-chain dehydrogenases/reductase (SDR) family of enzymes. Functioning as a homodimer, QDPR plays an important role in the recycling of tetrahydrobiopterin (BH₄), an essential cofactor for the hydroxylation of the aromatic amino acids (tryptophan, tyrosine and phenylalanine). 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 chromatography techniques.

AMINO ACID SEQUENCE:

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MGSSHHHHHH SSGLVPRGSH  MGSMAAAAAA  GEARRVLVYG  GRGALGSRVC
QAFRARNWWV ASVDVVENEE ASASIIVKMT DSFTEQADQV TAEVGKLLGE EKVDAILCVA
GGWAGGNAKS  KSLFKNCDLM  WKQSIWTSTI  SSSLATKHLK  EGGLTLAGA
KAALDGTGPM  IGYGMAKGAV  HQLCQSLAGK  NSGMPPGAAA  IAVLPVTLDT
PMNRKSMPEA DFSSWTPLEF LVETFHDWIT GKNRPSSGSL IQVVTTEGRT ELTPAYF

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Human Recombinant QDPR

RELATED PRODUCTS:

- NQO1, human recombinant (**Cat. No. 7571-100**)
- NQO1 (human intracellular) ELISA Kit (**Cat. No. K4926-100**)

FOR RESEARCH USE ONLY! Not to be used in humans.