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# QDPR, human recombinant protein

**Quinoid dihydropteridine reductase, DHPR, FLJ42391, PKU2, SDR33C1**

**Catalog # PBV11380r**

## Specification

### QDPR, human recombinant protein - Product info

| | |
|---|---|
| Primary Accession | P09417 |
| Concentration | 1 |
| Calculated MW | 28.2 kDa (267 aa, 1-244 aa + His Tag) KDa |

### QDPR, human recombinant protein - Additional Info

| | |
|---|---|
| Gene ID | 5860 |
| Gene Symbol | QDPR |

**Other Names**
Quinoid dihydropteridine reductase, DHPR, FLJ42391, PKU2, SDR33C1

| | |
|---|---|
| Gene Source | Human |
| Source | E.coli |
| Assay&Purity | SDS-PAGE; ≥90% |
| Assay2&Purity2 | N/A; |
| Recombinant | Yes |
| Results | Specific activity: > 27 units/ml |
| Sequence | MGSSHHHHHH SSGLVPRGSH MGSMAAAAAA GEARRVLVYG GRGALGSRCV QAFRARNWWV ASVDVVENEE ASASIIVKMT DSFTEQADQV TAEVGKLLGE EKVDAILCVA GGWAGGNAKS KSLFKNCDLM WKQSIWTSTI SSHLATKHLK EGGLLTLAGA KAALDGTPGM IGYGMAKGAV HQLCQSLAGK NSGMPPGAAA IAVLPVTLDT PMNRKSMPEA DFSSWTPLEF LVETFHDWIT GKNRPSSGSL IQVVTTEGRT ELTPAYF |

**Target/Specificity**
QDPR

**Format**
Liquid

**Storage**
-20°C; 1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol and 2 mM DTT

### QDPR, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

**QDPR, human recombinant protein - Images**

**QDPR, human recombinant protein - Background**

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.

**QDPR, human recombinant protein - References**

Dahl H.-H.M.,et al.Nucleic Acids Res. 15:1921-1932(1987).
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