



# Recombinant Human Dihydropteridine reductase (QDPR)

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| <b>Product Code</b>      | CSB-MP019133HU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Storage</b>           | Store at -20°C, for extended storage, conserve at -20°C or -80°C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Uniprot No.</b>       | P09417                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Product Type</b>      | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Immunogen Species</b> | Homo sapiens (Human)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purity</b>            | ≥85% (SDS-PAGE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Sequence</b>          | AAAAAAGEA RRVLVYGGRG ALGSRCVQAF RARNWWWASV DVVENEESA<br>SIIVKMTDSF TEQADQVTAE VGKLLGEEKV DAILCVAGGW AGGNAKSKSL<br>FKNCMLMWKQ SIWTSTISSH LATAKHLKEGG LLTLGAKAAA LDGTPGMIGY<br>GMAKGAVHQL CQSLAGKNSG MPPGAAAIIV LPVTLDTPMN RKSMPEADFS<br>SWTPLEFLVE TFHDWITGKN RPSSGSLIQV VTTEGRTELT PAYF                                                                                                                                                                                                                                                                        |
| <b>Source</b>            | Mammalian cell                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Target Names</b>      | QDPR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Protein Names</b>     | Recommended name: Dihydropteridine reductase EC= 1.5.1.34 Alternative name(s): HDHPR Quinoid dihydropteridine reductase                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Expression Region</b> | 2-244                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Tag Info</b>          | Tag type will be determined during the manufacturing process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Protein Length</b>    | Full Length of Mature Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Target Details</b>    | This gene encodes the enzyme dihydropteridine reductase, which catalyzes the NADH-mediated reduction of quinonoid dihydrobiopterin. This enzyme is an essential component of the pterin-dependent aromatic amino acid hydroxylating systems. Mutations in this gene resulting in QDPR deficiency include aberrant splicing, amino acid substitutions, insertions, or premature terminations. Dihydropteridine reductase deficiency presents as atypical phenylketonuria due to insufficient production of biopterin, a cofactor for phenylalanine hydroxylase. |
| <b>Reconstitution</b>    | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.                                                                                                                                                    |
| <b>Shelf Life</b>        | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.                                                                                                                                                                                                                                                                                |