

Recombinant Human Dihydropteridine Reductase/QDPR Protein (His Tag)

Catalog Number: PKSH032355

Note: Centrifuge before opening to ensure complete recovery of vial contents.

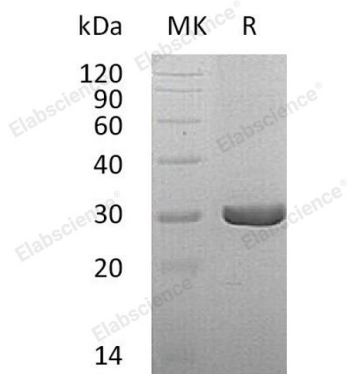
Description

| | |
|---------------|-----------------------------------------------------------------------------|
| Species | Human |
| Source | HEK293 Cells-derived Human QDPR protein Ala2-Phe244, with an C-terminal His |
| Calculated MW | 26.8 kDa |
| Observed MW | 29 kDa |
| Accession | P09417 |
| Bio-activity | Not validated for activity |

Properties

| | |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Dihydropteridine reductase, also known as HDHPR and Quinoid dihydropteridine reductase, QDPR and DHPR, belongs to the short-chain dehydrogenases/reductases (SDR) family. QDPR exists as a homodimer. QDPR is part of the pathway that recycles a substance called tetrahydrobiopterin, also known as BH4 and tryptophan hydroxylases. The regeneration of this substance is critical for the proper processing of several other amino acids in the body. Tetrahydrobiopterin also helps produce certain chemicals in the brain called neurotransmitters, which transmit signals between nerve cells. Defects in QDPR are the cause of BH4-deficient hyperphenylalaninemia type C (HPABH4C) which is a rare autosomal recessive disorder and is lethal.

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