



Recombinant Protein Technical Manual

**Recombinant Human Dihydropteridine
Reductase/QDPR Protein (His Tag)**
RPES2352

Product Data:

Product SKU: RPES2352

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P09417

Protein Information:

Molecular Mass: 26.8 kDa

AP Molecular Mass: 29 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 TrisHCl, pH8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Dihydropteridine Reductase; HDHPR; Quinoid Dihydropteridine Reductase; QDPR; DHPR

Immunogen Information:

Sequence: Ala2-Phe244

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.