



Recombinant Protein Technical Manual
Recombinant Human HPD/4HPPD Protein (His Tag)
RPES1779

Product Data:

Product SKU: RPES1779

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P32754

Protein Information:

Molecular Mass: 47.1 kDa

AP Molecular Mass: 44 kDa

Tag: N-6His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

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

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 50mM NaCl, 1mM DTT, 0.1mM PMSF, pH 8.0.

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

Application:

Synonyms: 4-Hydroxyphenylpyruvate Dioxygenase; 4-Hydroxyphenylpyruvic Acid Oxidase; 4HPPD; HPD; HPPDase; HPD; PPD

Immunogen Information:

Sequence: Met 1-Met393

Background:

4-Hydroxyphenylpyruvate Dioxygenase (4HPPD) belongs to the 4HPPD family. 4HPPD is a key enzyme in the degradation of tyrosine, which catalyzes the second reaction in the catabolism of tyrosine the conversation of 4-hydroxyphenylpyruvate to homogentisate. 4HPPD exists in homodimer forms, which uses zinc as a cofactor to catalyze the third step in the conversion of L-phenylalanine to fumarate and acetoacetic acid. When the active 4HPPD enzyme concentration is low in the human body, it results in high levels of tyrosine concentration in the blood, which can cause mild mental retardation at birth, and degradation in vision as a patient grows older.