

Recombinant Human HPD/4HPPD Protein (His Tag)

Catalog Number: PKSH032028

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

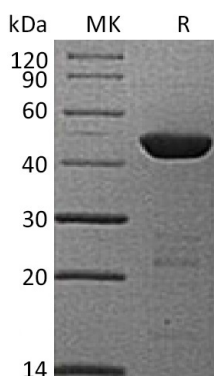
Description

Species	Human
Source	E.coli-derived Human HPD;4HPPD protein Met 1-Met393, with an N-terminal His
Calculated MW	47.1 kDa
Observed MW	40-50 kDa
Accession	P32754
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein 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 Tris-HCl, 50mM NaCl, 1mM DTT, 20% Glycerol, pH 8.0.

Data



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 conversion 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.