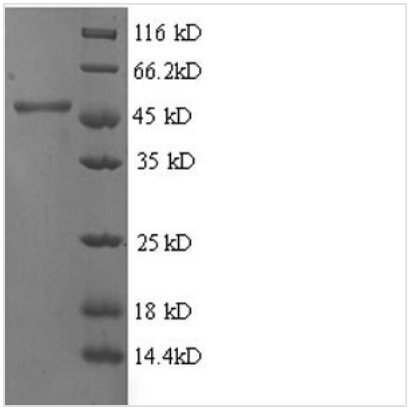
Recombinant Human 4-hydroxyphenylpyruvate dioxygenase (HPD)

Product Code	CSB-EP010698HU
Relevance	Key enzyme in the degradation of tyrosine.
Storage	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.
Uniprot No.	P32754
Alias	4-hydroxyphenylpyruvic acid oxidase ;4HPPD ;HPD ;HPPDase
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	TTYSDKGAKPERGRFLHFHSVTFWVGNAKQAASFYCSKMGFEPLAYRGLETG SREVVSHVIKQGKIVFVLSSALNPWNKEMGDHLVKHGDGVKDIAFEVEDCDYI VQKARERGAKIMREPWVEQDKFGKVKFAVLQTYGDTTHTLVEKMNYIGQFLP GYEAPAFMDPLLPKLPKCSLEMIDHIVGNQPDQEMVSASEWYLKNLQFHRFW SVDDTQVHTEYSSLRSIVVANYEESIKMPINEPAPGKKKSQIQEYVDYNGGAG VQHIALKTEDIITAIRHLRERGLEFLSVPSTYYKQLREKLKTAKIKVKENIDALEEL KILVDYDEKGYLLQIFTKPVQDRPTLFLEVIQRHNHQGFGAGNFNSLFKAFEEE QNLRGNLTNMETNGVVPGM
Lead Time	3-7 business days
Research Area	Metabolism
Source	E.coli
Gene Names	HPD
Expression Region	2-393aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	48.8kDa
Protein Description	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Cloning the gene encoding the Human HPD protein (2-393aa) into a plasmid vector leads to the formation of recombinant plasmid. The resulting recombination plasmid is transformed into e.coli cells. e.coli cells containing the recombinant plasmid survive in the presence of a specific antibiotic and are selected to be cultured under conditions conducive to the expression of the gene of interest. A N-terminal 6xHis tag is linked to the protein. Following expression, the recombinant Human HPD protein is isolated and purified from the cell lysate using affinity purification. Denaturing SDS-PAGE is utilized to resolve the resulting recombinant Human HPD protein, demonstrating a purity exceeding 90%.

Reconstitution

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.