

## 32-2447: HPD Recombinant Protein

**Alternative Name :** 4HPPD, GLOD3, 4-HPPD, PPD, HPPDase, Glyoxalase Domain Containing 3,4-Hydroxyphenylpyruvate Dioxygenase.

### Description

Source : Escherichia Coli. HPD produced in E.Coli is a single, non-glycosylated polypeptide chain containing 413 amino acids (1-393a.a.) and having a molecular mass of 47kDa. HPD is fused to a 20 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. 4-Hydroxyphenylpyruvate Dioxygenase Isoform-1 is an Fe-containing enzyme, which catalyzes the second reaction in the catabolism of tyrosine the conversion of 4-hydroxyphenylpyruvate to homogentisate. Present as a homodimer, HPD uses zinc as a cofactor to catalyze the third step in the conversion of L-phenylalanine to fumarate and acetoacetic acid. Flaws in the gene encoding HPD result in tyrosinemia type 3 and hawkinsinuria, two inborn defects of metabolism which are related to a number of symptoms, like mental retardation and seizures and hair and urine abnormalities.

### Product Info

**Amount :** 10 µg

**Purification :** Greater than 90% as determined by SDS-PAGE.

**Content :** The HPD protein solution (1mg/1ml) is formulated in 20mM Tris-HCl buffer (pH 8.0) 1mM DTT, 50mM NaCl and 20% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** MGSSHHHHHH SGLVPRGSH MTTYSKDGAK PERGRFLHFH SVTFWVGNAK QAASFYCSKM  
GFEPLAYRGL ETGSREVVSH VIKQGKIVFV LSSALNPWNK EMGDHLVKHG DGVKDIAFEV EDCDYIVQKA  
RERGAKIMRE PWVEQDKFGK VKFAVLQTYG DTTHTLVEKM NYIGQFLPGY EAPAFMDPLL PKLPKCSLEM  
IDHIVGNQPD QEMVSASEWY LKNLQFHRFW SVDDTQVHTE YSSLRISVVA NYEESIKMPI NEPAPGKKKS  
QIQEYVDYNG GAGVQHIALK TEDIITAIRH LRERGLEFLS VPSTYYKQLR EKLKTAKIKV KENIDALEEL  
KILVDYDEKG YLLQIFTKPV QDRPTLFLEV IQRHNNHQFG AGNFNSLFKA FEEEQNLGRN LTNMETNGVV  
PGM

