
Product Data Sheet

Product Name: HPD Human
 Cat. No.: GP21802
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	4HPPD; GLOD3; 4-HPPD; PPD; HPPDase; Glyoxalase Domain Containing 3; 4-Hydroxyphenylpyruvate Dioxygenase.		
Amino Acid Sequence	MGSSHHHHHH SSGLVPRGSH MTTYSKDGAK PERGRFLHFH SVTFWVGNAK QAASFYCSKM GFEPLAYRGL ETGSREVVSH VIKQGKIVFV LSSALNPWNK EMGDHLVKHG DGVKDIAFEV EDCDYIVQKA RERGAKIMRE PWVEQDKFGK VKFAVLQTYG DTTHTLVEKM NYIGQFLPGY EAPAFMDPLL PKLPKCSLEM IDHIVGNQPD QEMVSASEWY LKNLQFHRFW SVDDTQVHTE YSSLRISIVVA NYEESIKMPI NEPAPGKKKS QIQEYVDYNG GAGVQHIALK TEDIITAIRH LRERGLEFLS VPSTYYKQLR EKLKTAKIKV KENIDALEEL KILVDYDEKG YLLQIFTKPV QDRPTLFLEV IQRHNNHQGFG AGNFNSLFKA FEEEQNLRGN LTNMETNGVV PGM		
Formulation	The HPD protein solution (1mg/1ml) is formulated in 20mM Tris-HCl buffer (pH 8.0) 1mM DTT, 50mM NaCl and 20% glycerol.		

Introduction

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.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA