
Product Data Sheet

Product Name: Cyclophilin D Human, His
 Cat. No.: GP21526
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Peptidylprolyl isomerase D; PPID; CYPD; CYP-40; 40 kDa peptidyl-prolyl cis-trans isomerase; PPIase; Rotamase; Cyclophilin-40; CYP40; Cyclophilin-related protein; MGC33096; EC 5.2.1.8.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MSHPSQAKP SNPSNPRVFFDVDIGGERVG RIVLELFADI VPKTAENFRA LCTGEKGIGH TTGKPLHFKG CPFHRIKKF MIQGGDFSNQ NGTGGESIYG EKFEDEFHY KHDREGLLSMANAGRNTNGS QFFITTVPTP HLDGKHVVFQ QVIKGIGVAR ILENVEVKGEKPAKLCVIAE CGELKEGDDG GIFPKDGSGD SHPDFPEDAD IDLKDVDKIL LITEDLKNIG NTFKFSQNW MAIKKYAEVL RYVDSSKAVI ETADRKLQPIALSCVLNIG ACKLKMSNWQ GAIDSCLEAL ELDPSTKAL YRRAQGWQGLKEYDQALADL KKAQGIAPED KAIQAELLKV KQKIKAQKDK EKAVYAKMFA.		
Formulation	1mg/ml solution containing 1x PBS pH-7.4 & 10% glycerol.		

Introduction

Cyclophilin-D is a member of the peptidyl-prolyl cis-trans isomerase (PPIase) family. PPIases catalyze the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and speeds up the protein folding. Cyclophilin-D possess PPIase activity and binds to the immunosuppressant cyclosporin-A. Cyclophilin-D is very well known that its overexpression suppresses the apoptosis in cancer cell. Cyclophilin-D suppresses apoptotic cell death by the use of mitochondrial hexokinase-2 dependent mechanism in cancer cells.

Biological Activity

Specific activity is > 700 nmol/min/mg, and is defined as the amount of enzyme that cleaves 1nmole of suc-AAFP-pNA per minute at 25C in Tris-Hcl pH8.0 using

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

chymotrypsin.

Stability

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 storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

Cyclophilin-D Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain (amino acids 1-370) containing 390 amino acids and having a molecular mass of 42.9kDa. Cyclophilin-D is fused to a 20 aa His Tag at N-terminus and is 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