LD Biopharma, Inc.
9924 Mesa Rim Road Suite B
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human PPIL1 Protein
Catalog Number: hRP-0778
Manufacturer: LD Biopharma, Inc.

Introduction

Human peptidyl-prolyl cis-trans isomerase-like 1 (PPIL1) gene is a member of the cyclophilin family of peptidylprolyl isomerases (PPIases). The cyclophilins are a highly conserved, ubiquitous family, members of which play an important role in protein folding, immunosuppression by cyclosporin A, and infection of HIV-1 virions. Based on similarity to other PPIases, this protein could accelerate the folding of proteins and might catalyze the cis-trans isomerization of proline imidic peptide bonds in oligopeptides. Recent data demonstrated that PPIL1 interacts with Ski interaction protein (SKIP), which regulates spliceosome activities.

Full-length human PPIL1 (166 aa) gene was constructed with 17aa N-terminal T7 tag and expressed in E.coli as inclusion bodies. The final product was refolded using our unique "temperature shift inclusion body refolding" technology and chromatographically purified.

Gene Symbol:	PPIL1	(CGI-124; CYPL1; hCyPX; PPIase)
Accession Number:	NP_057143	
Species:	Human	
Size:	50 µg / Vial	
Composition:	1.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, sucrose and DTT.	
Storage:	In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.	

Key References

Wang,X., et al., *A large intrinsically disordered region in SKIP and its disorder-order transition induced by PPIL1 binding revealed by NMR*. J. Biol. Chem. 285 (7), 4951-4963 (2010)

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Stegmann,C.M., *The crystal structure of PPIL1 bound to cyclosporine A suggests a binding mode for a linear epitope of the SKIP protein*. PLoS ONE 5 (4), E10013 (2010)

Xu,C., et al., *Solution structure of human peptidyl prolyl isomerase-like protein 1 and insights into its interaction with SKIP*. J. Biol. Chem. 281 (23), 15900-15908 (2006)

Applications

1. May be used for in vitro SKIP related spliceosome regulation study with intracellular protein delivery of this protein.
2. As soluble/native protein, may be used as enzymatic substrate protein for kinase and ubiquitin assay development.
3. May be used for mapping PPIL1 protein–protein interaction assay development.
4. May be used as antigen for specific antibody development.

Quality Control

1. Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGEFGSMAAIPPDSWQPPNVYLETSMGIIVLELYWKHAPKTCKNFAELARRGY
YNGTKFHRIIKDFMIQGGDPTGTGRGGASIYGKQFEDELHPDLKFTGAGILAMANAGPDTNGSQ
FFVTLAPTQWLDGKHTIFGRVCQGIGMVNRVGMVETNSQDRPVDDVKIIKAYPSG