

AR09072PU-L**Recombinant human PPIH (Cyclophilin H) (aa 1-177)****Alternate names:**

CYP20, CYPH, PPlase H, Peptidyl-prolyl cis-trans isomerase H, Rotamase H, Small nuclear ribonucleoprotein particle-specific cyclophilin H, SnuCyp-20, U-snRNP-associated cyclophilin SnuCyp-20, USA-CYP

Quantity:

0.5 mg

Concentration:

1.0 mg/ml

Background:

Cyclophilin H (also known as peptidylpropyl isomerase H, PPIH) is a member of peptidyl-propyl cis-trans isomerase (PPlase) family, which catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and accelerates the folding of proteins. The cyclophilin H is a specific component of the human U4/U6 small nuclear ribonucleoprotein particle involved in the nuclear splicing of pre-mRNA. It stably associates with the U4/U6-60kD and -90kD proteins, the human orthologues of the *Saccharomyces cerevisiae* Prp4 and Prp3 splicing factors.

Uniprot ID:

[O43447](#)

NCBI:

[NP_006338.1](#)

GenelD:

[10465](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >95% by SDS PAGE

Buffer System: PBS, pH 7.4, 10% glycerol

Endotoxin Level: < 1.0 EU per 1 µg of protein (determined by LAL method)

Description:

Recombinant human cyclophilin H was expressed in *E. coli* and purified by conventional chromatography techniques.

AA Sequence:

MAVANS SPVN PVVFFDVSIG GQEVGRMKIE LFADVVPKTA ENFRQFCTGE FRKDGVP IGY
KGSTFHRVIK DFMIQGGDFV NGDGTGVASI YRGPFA DENF KLRHSAPGLL SMANSGPSTN
GCQFFITCSK CDWLDGKHVV FGKIIDGLLV MRKIENVPTG PNNKPKLPVV ISQCGEM

Specific Activity: > 220 nmoles/min/mg, defined as the amount of enzyme that cleaves

1 umole of suc-AAFP-pNA per minute at 25°C in Tris-HCl pH 8.0 using chymotrypsin.

Molecular weight: 19.2 kDa (177 aa)

Storage:

Store (in aliquots) at -20°C. Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

Reidt U., et al. (2000) *J Biol Chem.* 275(11):7439-42.

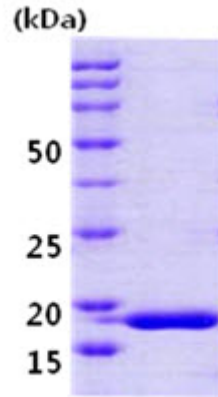
Horowitz DS., et al. (2002) *EMBO* 21(3):470-80.

Protocols:**Activity Assay**

1. Prepare 170 µl assay buffer into a suitable container and pre-chill on ice before use: The final concentrations are 200 mM Tris-HCl, pH 8.0, and 20nM chymotrypsin.
2. Add 10 µl of recombinant Cyclophilin H (PPIH) protein with 1 µg in assay buffer.

3. Mix by inversion and equilibrate to 1°C and monitor the A405nm until the value is constant using a spectrophotometer.
4. Add 20 ul pre-chilled 5mM suc-AAFP-pNA. (Substrate was dissolved in TFE that contained 460mM LiCl to a concentration of 3 mM)
5. Record the increase in A405 nm for 30 minutes at 25°C.

Pictures:



15% SDS-PAGE (3ug)

PPIH: 15% SDS-PAGE (3 µg)

