

Recombinant Human Peptidylprolyl Isomerase H

Cat. No. PPIH-111H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human cyclophilin H was expressed in E.coli and purified by conventional chromatography techniques, 19.2 kDa (177 aa).
Species	Human
Source	E.coli
Description	Cyclophilin H (also known as peptidylpropyl isomerase H, PPIH) is a member of peptidyl-propyl cis-trans isomerase (PPIase) 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 premRNA. It stably associates with the U4/U6-60kD and -90kD proteins, the human orthologues of the <i>Saccharomyces cerevisiae</i> Prp4 and Prp3 splicing factors.
Sequences of amino acids	MAVANSSPVN PVVFFDVSI GG QEVGRMKIEL FADVVPKTAE NFRQFCTGEF RKDGVPIGYK GSTFHRVIKD FMIQGGDFVN GDGTGVASIY RGPFADENFK LRHSAPGLLS MANS GPSTN GCQFFITCSK CDWLDGKHV VFGKIIDGLL VMRKIENVPT GPNNKPKLPV V ISQCGEM
Formulation	Liquid in phosphate-buffered saline (pH 7.4) containing 10% glycerol.
Purity	> 95% by SDS PAGE
Concentration	1 mg/ml (determined by Bradford assay)

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Biological activity	Specific activity is > 220 nmoles/min/mg, and is defined as the amount of enzyme that cleaves 1umole of suc-AAFP-pNA per minute at 25°C in Tris-Hcl pH8.0 using chymotrypsin.
Activity Assay	1. Prepare 170ul 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 10ul of recombinant Cyclophilin H (PPIH) protein with 1ug 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 20ul 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.
Storage	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION

Gene Name	PPIH peptidylprolyl isomerase H (cyclophilin H) [Homo sapiens]
Synonyms	PPIH; CYPH; CYP-20; MGC5016; SnuCyp-20; USA-CYP; peptidylprolyl isomerase H (cyclophilin H); CYPH; CYP-20; MGC5016; USA-CYP; SnuCyp-20; peptidylprolyl isomerase H; PPIase h; rotamase H; cyclophilin H; USA-CyP SnuCyp-20; OTTHUMP00000008725; peptidylprolyl cis-trans isomerase H; U-snRNP-associated cyclophilin SunCyp-20; small nuclear ribonucleoprotein particlespecific cyclophilin H; CYP20; EC 5.2.1.8; Rotamase H; Small nuclear ribonucleoprotein particle-specific; peptidylprolyl isomerase H; peptidylprolyl isomerase H (cyclophilin H).
Gene ID	10465
mRNA Refseq	NM-006347

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Protein Refseq	NP-006338
MIM	606095
UniProt ID	O43447
Chromosome Location	1p34.1
Function	cyclosporin A binding, isomerase activity, isomeraseactivity
PDB rendering based on 1mzw	