

**AR09117PU-L****Recombinant human PPIL1 (aa 1-166), His-tagged****Alternate names:**

CYPL1, PPlase, Peptidyl-prolyl cis-trans isomerase-like 1, Rotamase PPIL1

**Quantity:**

0.5 mg

**Concentration:**

1.0 mg/ml (determined by Bradford assay)

**Background:**

Peptidylprolyl isomerase (cyclophilin)-like 1, also known as PPIL1, 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. Human PPIL1 might play an important role in proliferation of cancer cells through modulation of phosphorylation of stathmin. So it is expected as a novel molecular target for colon-cancer therapy.

**Uniprot ID:**[Q9Y3C6](#)**NCBI:**[NP\\_057143.1](#)**GeneID:**[51645](#)**Species:**

Human

**Source:**

E. coli

**Format:****State:** Liquid purified protein**Purity:** >95% by SDS PAGE**Buffer System:** 20 mM Tris-HCl pH 8.0, 20% glycerol**Description:**

Recombinant PPIL1, fused to His-tag at C-terminus, was expressed in E.coli and purified by conventional chromatography techniques.

**AA Sequence:**

MAAIPPD~~SWQ~~ PPNVYLETSM GIIVLELYWK HAPKTCKNFA ELARRGYNG TKFHRIIKDF  
MIQGGDPTGT GRGGASIYGK QFEDELHPDL KFTGAGILAM ANAGPDTNGS QFFVTLAPTQ  
WLDGKHTIFG RVCQGIGMVN RVGMVETNSQ DRPVDDVKII KAYPSGLEHH HHHH

**Specific Activity:** > 300 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:** 19.3 kDa (174 aa)

**Storage:**

Store (in aliquots) at -20°C or -70°C. Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

**General Readings:**

Xu C., et al., (2006) J Biol Chem. 281(23):15900-8.

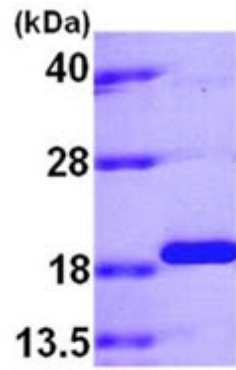
Obama K., et al., (2006) Clin Cancer Res. 12(1):70-6.

**Protocols:****Activity Assay**

1. Prepare 170 ul 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 ul of recombinant PPIL1 protein with 1 ug 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)

PPIL1, 1-166 aa, His-tagged: 15% SDS-PAGE (3  $\mu$ g)

