

## Product datasheet for **AR09016PU-L**

### Cyclophilin-40 (1-370, His-tag) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Cyclophilin-40 (1-370, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSSLVPRGSH</u> MSHPSQAKP SNPSNPRVFF DVDIGGERVG RIVLELFADI VPKTAENFRA LCTGEKGIGH TTGKPLHFKG CPFHRIKKF MIQGGDFSNQ NGTGGESIYG EKFEDEFHY KHDREGLISM ANAGRNTNGS QFFITVPTP HLDGKHVVFQ QVIKIGIVAR ILENVEVKGE KPAKLCVIAE CGELKEGDDG GIFPKDGS GD SHPDFPEDAD IDLKDVDKIL LITEDLKNIG NTFKFSQNWE MAIKKYAEVL RYVDSSKAVI ETADRAKLQP IALSCVLNIG ACKLKMSNWQ GAIDSCLEAL ELDPSNTKAL YRRAQGWQGL KEYDQALADL KKAQGIAPED KAIQAELLKV KQKIKAQKDK EKAVYAKMFA
Tag:	His-tag
Predicted MW:	42.9 kDa
Concentration:	lot specific
Purity:	by SDS-PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: PBS, pH 7.4, 10% glycerol
Bioactivity:	Specific: > 210 nmoles/min/mg, defined as the amount of enzyme that cleaves 1 umole of suc-AAPF-pNA per minute at 25°C in Tris-HCl pH 8.0 using chymotrypsin.
Preparation:	Liquid purified protein
Applications:	Protocol: <b>Activity Assay</b> 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 Cyclophilin D 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 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.



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<b>Protein Description:</b>	Recombinant human cyclophilin D, fused to His-tag, was expressed in E.coli and purified by conventional chromatography techniques.
<b>Storage:</b>	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>RefSeq:</b>	<a href="#">NP_005029</a>
<b>Locus ID:</b>	5481
<b>UniProt ID:</b>	<a href="#">Q08752</a> , <a href="#">E5KN55</a>
<b>Cytogenetics:</b>	4q32.1
<b>Synonyms:</b>	CYP-40; CYPD
<b>Summary:</b>	The protein encoded by this gene 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 accelerate the folding of proteins. This protein has been shown to possess PPIase activity and, similar to other family members, can bind to the immunosuppressant cyclosporin A. [provided by RefSeq, Jul 2008]
<b>Protein Families:</b>	Stem cell - Pluripotency
<b>Protein Pathways:</b>	Calcium signaling pathway, Huntington's disease, Parkinson's disease

**Product images:**