

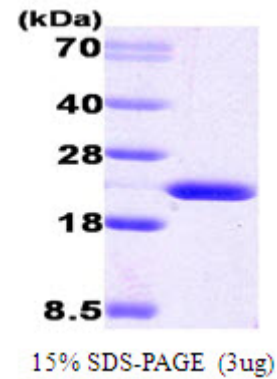
## AR09014PU-L

## Recombinant human Cyclophilin B (aa 26-216)

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Alternate names:</b>  | CYP-S1, CYPB, PPIB, PPIase B, Peptidyl-prolyl cis-trans isomerase B, Rotamase B, S-cyclophilin, SCYLP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Quantity:</b>         | 0.5 mg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Concentration:</b>    | 1.0 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Background:</b>       | Cyclophilin B (also known as PPIB, peptidylpropyl isomerase B) is a cyclosporine-binding protein and is mainly located within the endoplasmic reticulum. It is associated with the secretory pathway and released in biological fluids. This protein can bind to cells derived from T- and B-lymphocytes, and may regulate cyclosporine A-mediated immunosuppression.                                                                                                                                                                                                                                                                                                                                    |
| <b>Uniprot ID:</b>       | <a href="#">P23284</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>NCBI:</b>             | <a href="#">NP_000933.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>GeneID:</b>           | <a href="#">5479</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Species:</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Source:</b>           | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Format:</b>           | <b>State:</b> Liquid purified protein<br><b>Purity:</b> >95% by SDS-PAGE<br><b>Buffer System:</b> 20 mM Tris 8.0, 0.20 mM NaCl, 0.5 mM DTT, 10% glycerol<br><b>Endotoxin Level:</b> < 1.0 EU per 1 microgram of protein (determined by LAL method)                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Description:</b>      | <p>Recombinant human cyclophilin B was expressed in E.coli and purified by using conventional chromatography techniques.</p> <p><b>AA Sequence:</b><br/>           MLLPGPSAAD EKKKGPKVTV KVFYDLRIGD EDVGRVIFGL FGKTVPKTVD NFVALATGEK<br/>           GFGYKNSKFH RVIKDFMIQG GDFTRGDGTG GKSİYGERFP DENFKLKHYG PGWVSMANAG<br/>           KDTNGSQFFI TTVKTAWLDG KHVVFQKYLE GMEVVRKVES TKTDSRDKPL KDVIADCGK<br/>           IEVEKPFAIA KE</p> <p><b>Specific Activity:</b> &gt; 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.</p> <p><b>Molecular weight:</b> 21.2 kDa (192 aa), confirmed by MALDI-TOF</p> |
| <b>Storage:</b>          | <p>Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.</p> <p>Avoid repeated freezing and thawing.</p> <p>Shelf life: one year from despatch.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>General Readings:</b> | <p>Watashi K, et al.(2005) Mol Cell. 19(1):111-22.</p> <p>Obata Y, et al.(2005) J Biol Chem. ;280(18):18355-60.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Protocols:</b>        | <p><b>Activity Assay</b></p> <ol style="list-style-type: none"> <li>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.</li> <li>2. Add 10 ul of recombinant Cyclophilin B protein with 1 ug in assay buffer.</li> </ol>                                                                                                                                                                                                                                                                                                                                                              |

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:**



Cyclophilin B (PPIB): 15% SDS-PAGE (3 µg)

