

## 32-6892: PPID Mouse

**Application :** Functional Assay

**Alternative Name :** Peptidyl-prolyl cis-trans isomerase D, PPlase D, 40 kDa peptidyl-prolyl cis-trans isomerase, Cyclophilin-40, CYP-40, Cyclophilin-related protein, CYP40, CYPD, PPID, Peptidylprolyl Isomerase D.

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

Cyclophilin-D is a member of the peptidyl-prolyl cis-trans isomerase (PPlase) family. PPlases catalyze the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and speeds up the protein folding. Cyclophilin-D possess PPlase activity and binds to the immunosuppressant cyclosporin-A. Cyclophilin-D is very well known that its overexpression suppresses the apoptosis in cancer cell. Cyclophilin-D suppresses apoptotic cell death by the use of mitochondrial hexokinase-2 dependent mechanism in cancer cells.

PPID Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 395 amino acids (1-370a.a.) and having a molecular mass of 43.4kDa. PPID is fused to a 25 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 1 µg / 5 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** PPID protein solution (1mg/ml) containing 20mM Tris-Hcl buffer (pH8.0), 10% glycerol and 1mM DTT.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MGSEFMASH PAAKPSNSKN PRVFFDVGIG GERVGRIVLE LFADIVPKTA ENFRALCTGE KGTGSTTGKP LHFKGCPFHR IIKKFMIQGG DFSNQNGTGG ESIYGEKFED ENFHYKHDRE GLLSMANAGP NTNGSQFFIT TVPTPHLDGK HVVFGQVIKG LGVARTLENV EVNGEKPAKL CVIAECGELK EGDDWGIFPK DSGGDSHPDF PEDADIDLKD VDKILLISED LKNIGNTFFK SQNWEMAIAK YAKVLRVYDS SKAVIEKADR SRLQPIALSC VLNIGACKLK MSNWQGAIDS CLEALEMDPS NTKALYRKAQ GWQGLKEYDQ ALADLKKAQE IAPGDKAIIQA ELLKVKQMIK AQKDEKAVY AKMFA.

### Application Note

Specific activity is > 700nmol/min/mg, and is defined as the amount of enzyme that cleaves 1umole of suc-AAFP-PNA per minute at 37°C in Tris-HCl pH 8.0 using chymotrypsin.