

# **Human Recombinant Cyclophilin D**

**CATALOG #**: 6312-100 100 μg

**ALTERNATE NAMES:** Peptidylprolyl isomerase D, PPID, CYPD, CYP-40.

SOURCE: E.Coli

**PURITY:** > 95% by SDS - PAGE

**MOL. WEIGHT:** 42.9 kDa (390 aa – 1-370 aa + His Tag).

**FORMULATION:** 1 mg/ml solution in PBS (pH 7.4) containing 10%

glycerol.

#### STORAGE CONDITIONS:

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.

### **DESCRIPTION:**

Cyclophilin D 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 and thus their formation. Cyclophilin D is also a mitochondrial matrix protein, which plays a decisive role in mitochondrial permeability transition. It can bind to the immunosuppressant cyclosporine A and its overexpression suppresses the apoptosis in cancer cells.

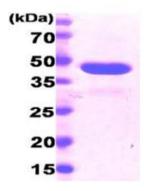
# **AMINO ACID SEQUENCE:**

MGSSHHHHHH SSGLVPRGSH MSHPSPQAKP SNPSNPRVFF DVDIGGERVG RIVLELFADI VPKTAENFRA LCTGEKGIGH TTGKPLHFKG CPFHRIIKKF MIQGGDFSNQ NGTGGESIYG EKFEDENFHY KHDREGLLSM ANAGRNTNGS QFFITTVPTP HLDGKHVVFG QVIKGIGVAR ILENVEVKGE KPAKLCVIAE CGELKEGDDG GIFPKDGSGD SHPDFPEDAD IDLKDVDKIL LITEDLKNIG NTFFKSQNWE MAIKKYAEVL

RYVDSSKAVI ETADRAKLQP IALSCVLNIG ACKLKMSNWQ GAIDSCLEAL ELDPSNTKAL YRRAQGWQGL KEYDQALADL KKAQGIAPED KAIQAELLKV KQKIKAQKDK EKAVYAKMFA

#### **BIOLOGICAL ACTIVITY:**

Specific activity is > 210 nmoles/min/mg, and is defined as the amount of enzyme that cleaves 1 µmole of Suc-AAFP-pNA per minute at 25°C in Tris HCl pH 8.0 using chymotrypsin.



15% SDS-PAGE (3ug)

Human Recombinant Cyclophilin D

# **RELATED PRODUCTS:**

- Cyclosporine A (Cat. No. 1522-100, 1G)
- Human Recombinant Cyclophilin B (Cat. No. 6310-100)
- Human Recombinant Cyclophilin A (Cat. No. 6311-100)
- Human Recombinant Cyclophilin D (Cat. No. 6312-100)
- Human Recombinant Cyclophilin H (Cat. No. 6313-100)

FOR RESEARCH USE ONLY! Not to be used in humans.

