# **PRODUCT INFORMATION**

Expression system E.coli

**Domain** 1-165aa

**UniProt No.** P62937

NCBI Accession No. NP\_066953.1

### **Alternative Names**

Peptidylprolyl isomerase A, CYPA, CYPH, MGC12404, MGC23397, MGC117158, Cyclophilin A, Cyclosporin A binding protein, Peptidyl prolyl cis trans isomerase A, PPIA, PPIase A, Rotamase A, T cell cyclophilin

## **PRODUCT SPECIFICATION**

### **Molecular Weight**

20kDa (185aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20mM NaCl, 0.5mM DTT, 10% glycerol

Purity
> 95% by SDS-PAGE

### **Endotoxin level**

< 1 EU per 1ug of protein (determined by LAL method)

## **Biological Activity**

Specific activity is > 650nmol/min/mg, and is defined as the amount of enzyme that cleaves 1nmole of suc-AAPFpNA per minute at 37C in Tris-HCl pH 8.0 using chymotrypsin.

# Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.



# BACKGROUND

### Description

Cyclophilin A (also known as Peptidylprolyl isomerase A, PPIA) encodes a member of the peptidyl-prolyl cis-trans isomerase family. They are highly-conserved cytoplasmic enzymes that accelerate protein folding. Cyclophilin A is also incorporated into many viruses, including HIV-1, where it has been speculated to be involved in functions such as viral assembly and infectivity. Recombinant human PPIA, was expressed in E. coli and purified by using conventional chromatography techniques.

### **Amino acid Sequence**

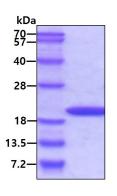
<MGSSHHHHHH SSGLVPRGSH> MVNPTVFFDI AVDGEPLGRV SFELFADKVP KTAENFRALS TGEKGFGYKG SCFHRIIPGF MCQGGDFTRH NGTGGKSIYG EKFEDENFIL KHTGPGILSM ANAGPNTNGS QFFICTAKTE WLDGKHVVFG KVKEGMNIVE AMERFGSRNG KTSKKITIAD CGQLE

### **General References**

Holzman, T.F., et al, (1991). J. Biol. Chem. 266(4): 2474-2479 Berthoux L , et al, (2005). Proc Natl Acad Sci u S A. 102(41):14849-53

## DATA

### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.