

32-6721: Cyclophilin D Human

Application : Functional Assay

Alternative Name : Peptidylprolyl isomerase D, PPID, CYPD, CYP-40, 40 kDa peptidyl-prolyl cis-trans isomerase, PPIase, Rotamase, Cyclophilin-40, CYP40, Cyclophilin-related protein, MGC33096, EC 5.2.1.8.

Description

Source: Escherichia Coli.

Sterile filtered colorless solution.

Cyclophilin-D 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 speeds up the protein folding. Cyclophilin-D possess PPIase 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.

Cyclophilin-D Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 178 amino acids and having a molecular mass of 18.9kDa. The Cyclophilin-D is purified by proprietary chromatographic techniques.

Product Info

Amount : 10 µg / 50 µg

Purification : Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

Content : Cyclophilin-D 0.2µm filtered solution containing PBS pH7.4, 1mM DTT and 10% glycerol.

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). Avoid multiple freeze-thaw cycles.

Amino Acid : CSKGSQDPSS SSSSGNPLVY LDVDANGKPL GRVVLELKAD VVPKTAENFR ALCTGEKGFG YKGSTFHRVI PSFMCQAGDF TNHNGTGGKS IYGSRFPDEN FTLKHVGPV LSMANAGPNT NGSQFFICTI KTDWLDGKHV VFGHVKEGMD VVKKIESFGS KSGRTSKKIV ITDCGQLS.

Application Note

Specific activity is > 250 nmoles/min/mg, and is defined as the amount of enzyme that cleaves 1umole of suc-AAFP-pNA per minute at 25Å°C in Tris-HCl pH8.0 using chymotrypsin.