

AR09314PU-N

Human Cyclophilin G / PPIG (1-175, His-tag) - Purified

Alternate names:

CARS-Cyp, CARS-cyclophilin, CASP10, Clk-associating RS-cyclophilin, PPlase G, Peptidyl-prolyl cis-trans isomerase G, Peptidyl-prolyl isomerase G, Rotamase G, SR-cyclophilin, SR-cyp, SRcyp

Quantity:

0.1 mg

Concentration:

1.0 mg/ml (determined by Bradford assay)

Background:

Peptidyl-prolyl cis-trans isomerase G (PPIG), also known as Cyclophilin G, is a member of peptidyl-prolyl cis-trans isomerase family (PPlases). This protein catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and is implicated in the folding, transport, and assembly of proteins. It is localized to the nuclear speckles, a nuclear compartment rich in splicing factors, and interacts with the splicing factors SC35 and pinin. Cyclophilin G also may play an important role in the regulation of pre-mRNA splicing.

Uniprot ID:

[Q13427](#)

NCBI:

[AAH01555](#)

GenelD:

[9360](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >95% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol

Description:

Recombinant human Cyclophilin G, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MGIKVQRPRC FFDIAINNQP AGRVVFELFS DVCPKTCENF
RCLCTGEKGT GKSTQKPLHY KSCLFHRVVK DFMVQGQDFS EGNRGGESI YGGFFEDSF
AVKHNKEFL SMANRGKDTN GSQFFITTKP TPHLDGHHVV FGQVISGQEV VREIENQKTD
AASKPFAEVR ILSCG

Specific Activity: > 200 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

Storage:

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

Modjtahedi N., et al. (2004). J Biol Chem. 279(21):22322-30.

Ouyang P., et al. (2004). Biochem Biophys Re Commun. 321 (3): 638-47.

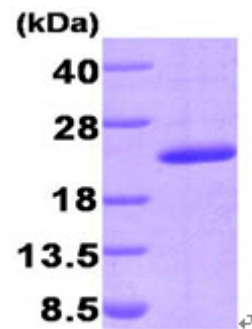
Protocols:

Activity Assay

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.

2. Add 1 ug of recombinant Cyclophilin G protein to assay buffer.
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:



15% SDS-PAGE (3ug)

Recombinant human Cyclophilin G (1-175 aa), His-tagged: 15% SDS-PAGE (3 µg)

