

Human PPIase / FKBP7 Protein (His Tag)

Catalog Number: 13250-H08H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

FKBP23; PPIase; 23kDa; FKBP-7; FKBP23

Protein Construction:

A DNA sequence encoding the human FKBP7 (Q9Y680-2) (Met1-Gln218) was expressed with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: (84.2±12.5) % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Gln 24

Molecular Mass:

The recombinant human FKBP7 consists of 206 amino acids and predicts a molecular mass of 23.8 kDa. It migrates as an approximately 27 and 30 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

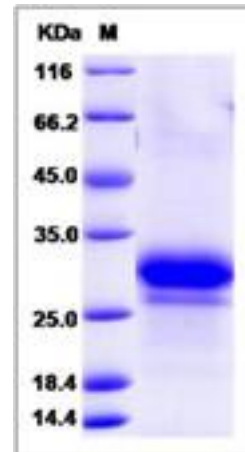
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

PPIase is a member of the immunophilin protein family. It also belongs to the cyclophilin-type PPIase family, PP1L3 subfamily. PPIase contains 1 PPIase cyclophilin-type domain. Members of the immunophilin protein family play a role in immunoregulation and basic cellular processes involving protein folding and trafficking. PPIases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides. It has a very high substrate specificity for the four-residue peptide Ala-Ala-Pro-Phe only when the proline peptide bond is in the trans state. It interacts with several intracellular signal transduction proteins including type I TGF-beta receptor. It also interacts with multiple intracellular calcium release channels, and coordinates multi-protein complex formation of the tetrameric skeletal muscle ryanodine receptor. In mouse, deletion of this homologous gene causes congenital heart disorder known as noncompaction of left ventricular myocardium.

References

- 1.1. Shor B, *et al.* (2008) A new pharmacologic action of CCI-779 involves FKBP12-independent inhibition of mTOR kinase activity and profound repression of global protein synthesis. *Cancer Res.* 68(8):2934-43.
- 2.2. Talmud PJ, *et al.* (2009) Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. *Am J Hum Genet.* 85(5):628-42.
- 3.3. Deleersnijder A, *et al.* (2011) Comparative analysis of different peptidyl-prolyl isomerases reveals FK506-binding protein 12 as the most potent enhancer of alpha-synuclein aggregation. *J Biol Chem.* 286(30):26687-701.

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