

Recombinant Bovine Peptidyl-Prolyl Cis-Trans Isomerase B (PPIB)

Cat. No.: AP9C463

Product Type: Animal Proteins

Size: 10 µg; 50 µg; 200 µg; 1 mg; 5 mg

Product Overview

BioVenic's Recombinant Bovine Peptidyl-Prolyl Cis-Trans Isomerase B (PPIB) is a recombinant protein expressed from *E.coli*. Its predicted molecular weight is 22.4 kDa. The purity is >95% (SDS-PAGE).

Specifications

Type	Recombinant Protein
Species	Bovine
Expression System	<i>E.coli</i>
Purity	>95% (SDS-PAGE)
Endotoxin	< 1 EU/µg
Predicted Molecular Weight	22.4 kDa
Molecular Weight	22 kDa
Physical State	Lyophilized
Formulation	The buffer before lyophilization is PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.

Target Information

Bovine peptidyl-prolyl cis-trans isomerase B (PPIB), also known as cyclophilin B, is an enzyme that belongs to the cyclophilin family of peptidyl-prolyl cis-trans isomerases (PPIases). These enzymes catalyze the cis-trans isomerization of proline imidic peptide bonds in oligopeptides, which is an essential step in protein folding. PPIB is involved in the folding of proteins, particularly in the endoplasmic reticulum (ER), and plays a role in the proper formation of disulfide bonds, which are crucial for the correct structure and function of many proteins. In the Bovine, PPIB contributes to protein homeostasis and is important for the survival of cells, particularly in the context of secretory proteins like insulin, where proper folding is essential for biological activity. Disruptions in PPIB function can lead to ER stress and apoptosis, as seen in studies where inhibition of PPIB mediates cyclosporin A-induced apoptosis of islet β cells.

Protein	Bovine Peptidyl-Prolyl Cis-Trans Isomerase B (PPIB)
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Protein Synonym	PPIB; PPI-B; CYP-S1; CyP-B; SCYLP; PPIase B; Rotamase B; S-cyclophilin; Peptidylprolyl Isomerase B; Peptidyl-Prolyl Cis-Trans Isomerase B
Gene ID	281419
UniProt ID	P80311

Shipping and Storage

This product is shipped with dry ice. It is recommended to aliquot as needed and store at -80°C upon receipt. Reconstituted protein solution can be stored at 4°C for 1 week, at < -80°C for 12 months. Avoid repeated freezing and thawing.

User Note

Always centrifuge tubes before opening. Avoid mixing by vortexing or pipetting. Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Aliquot the reconstituted solution to minimise freeze-thaw cycles.

Reference

Bose, S. *et al.* The characterization of a cyclophilin-type peptidyl prolyl cis-trans-isomerase from the endoplasmic-reticulum lumen. *The Biochemical journal* vol.1994, 300(Pt 3): 871-5.

The product is for research use only. Not for commercial, prophylactic, diagnostic, or therapeutic applications. Please determine the purpose of the product before purchasing. For further information and inquiry, please contact us.