

Product datasheet

Recombinant Cyclophilin B protein ab53870

1 References 1 Image

Description

Product name Recombinant Cyclophilin B protein

Biological activity Specific activity is > 220 nmoles/min/mg, and is defined as the amount of enzyme that cleaves 1 µmole of suc-AAFP-pNA per minute at 25°C in Tris-Hcl pH8.0 using chymotrypsin.

Activity Assay

Prepare 170 µl 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.
 Add 10 µl of recombinant Cyclophilin B protein with 1 µg in assay buffer.
 Mix by inversion and equilibrate to 1°C and monitor the A405nm until the value is constant using a spectrophotometer.
 Add 20 µl pre-chilled 5mM suc-AAFP-pNA. (Substrate was dissolved in TFE that contained 460mM LiCl to a concentration of 3 mM)
 Record the increase in A405 nm for 30 minutes at 25°C.

Purity > 95 % SDS-PAGE.
 This product was expressed in E.coli and purified by using conventional chromatography techniques.

Endotoxin level < 1.000 Eu/µg

Expression system Escherichia coli

Protein length Protein fragment

Animal free No

Nature Recombinant

Specifications

Our [Abpromise guarantee](#) covers the use of **ab53870** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE
 Functional Studies

Mass spectrometry MALDI-TOF

Form Liquid

Preparation and Storage

Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.0077% DTT, 0.242% Tris, 10% Glycerol (glycerin, glycerine), 0.116% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function

PPlases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides.

Involvement in disease

Defects in PPIB are the cause of osteogenesis imperfecta type 9 (OI9) [MIM:259440]. OI9 is a connective tissue disorder characterized by bone fragility, low bone mass and bowing of limbs due to multiple fractures. Short limb dwarfism and blue sclerae are observed in some but not all patients.

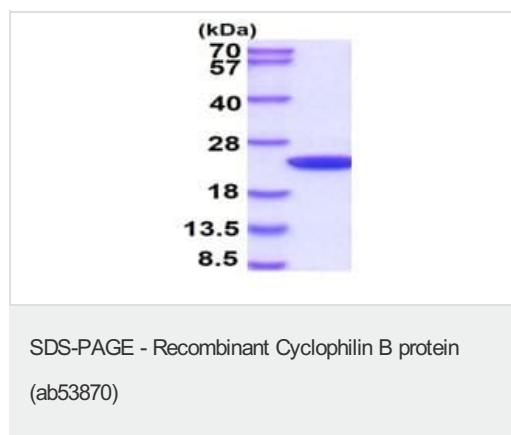
Sequence similarities

Belongs to the cyclophilin-type PPlase family. PPlase B subfamily.
Contains 1 PPlase cyclophilin-type domain.

Cellular localization

Endoplasmic reticulum lumen. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



ab53870 on 15% SDS-PAGE (3µg)

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