# abcam

## Product datasheet

## Recombinant Human P4HB protein ab115719

## 2 Images

**Description** 

Product name Recombinant Human P4HB protein

Biological activity >200U/mg

Purity > 95 % SDS-PAGE.

ab115719 is purified by multi-step chromatography.

**Expression system** Escherichia coli

Accession P07237

Protein length Full length protein

Animal free No

**Nature** Recombinant

Species Human
Predicted molecular weight 58 kDa

Tags His tag N-Terminus

#### **Specifications**

Our Abpromise guarantee covers the use of ab115719 in the following tested applications.

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

**Applications** Western blot

**Functional Studies** 

SDS-PAGE

Form Liquid

Additional notes >200U/mg

## **Preparation and Storage**

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

Constituents: 0.02% (R\*,R\*)-1,4-Dimercaptobutan-2,3-diol, 0.61% Tris, 0.03% EDTA, 5%

Glycerol (glycerin, glycerine), 0.88% Sodium chloride

#### General Into

#### **Function**

This multifunctional protein catalyzes the formation, breakage and rearrangement of disulfide bonds. At the cell surface, seems to act as a reductase that cleaves disulfide bonds of proteins attached to the cell. May therefore cause structural modifications of exofacial proteins. Inside the cell, seems to form/rearrange disulfide bonds of nascent proteins. At high concentrations, functions as a chaperone that inhibits aggregation of misfolded proteins. At low concentrations, facilitates aggregation (anti-chaperone activity). May be involved with other chaperones in the structural modification of the TG precursor in hormone biogenesis. Also acts a structural subunit of various enzymes such as prolyl 4-hydroxylase and microsomal triacylglycerol transfer protein MTTP.

## Sequence similarities

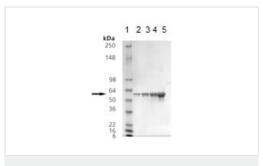
Belongs to the protein disulfide isomerase family.

Contains 2 thioredoxin domains.

#### **Cellular localization**

Endoplasmic reticulum lumen. Melanosome. Cell membrane. Highly abundant. In some cell types, seems to be also secreted or associated with the plasma membrane, where it undergoes constant shedding and replacement from intracellular sources (Probable). Localizes near CD4-enriched regions on lymphoid cell surfaces. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

#### **Images**



SDS-PAGE - Recombinant Human P4HB protein (ab115719)

SDS-PAGE analysis

Lane 1: MW marker

Lane 2: ab115719 at 0.5 μg Lane 3: ab115719 at 1 μg Lane 4: ab115719 at 2 μg

Lane 5: ab115719 at 5 µg



Western blot - Recombinant Human P4HB protein (ab115719)

Monoclonal mouse P4HB antibody + Recombinant Human P4HB protein (ab115719) at  $0.05~\mu g$ 

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

## Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors