abcam

Product datasheet

Recombinant Human EPB41 protein ab158364

1 Image

Overview

Product name	Recombinant Human EPB41 protein
Protein length	Protein fragment

Description

Nature	Recombinant
Source	Wheat germ

Amino Acid Sequence

Species	Human
Sequence	IEFGTSLDEEIILKAPIAAPEPELKTDPSLDLHSLSSAETQPAQEELRED PDFEIKEGEGLEECSKIEVKEESPQSKAETELKASQKPIRKHRNMHCKVS LLDDTVYECV
Amino acids	116 to 225
Tags	proprietary tag N-Terminus

Specifications

Our Abpromise guarantee covers the use of **ab158364** 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 ELISA
Form	Liquid
Additional notes	Protein concentration is above or equal to 0.05 mg/ml.

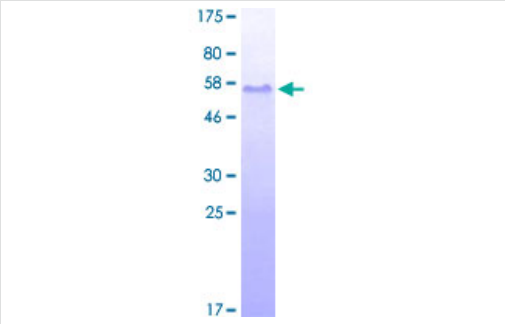
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

Function	Protein 4.1 is a major structural element of the erythrocyte membrane skeleton. It plays a key role in regulating membrane physical properties of mechanical stability and deformability by stabilizing spectrin-actin interaction. Recruits DLG1 to membranes.
Involvement in disease	Defects in EPB41 are the cause of elliptocytosis type 1 (EL1) [MIM:611804]. EL1 is a Rhesus-linked form of hereditary elliptocytosis, a genetically heterogeneous, autosomal dominant, hematologic disorder. It is characterized by variable hemolytic anemia and elliptical or oval red cell shape. Defects in EPB41 are a cause of hereditary pyropoikilocytosis (HPP) [MIM:266140]. HPP is an autosomal recessive hematologic disorder characterized by hemolytic anemia, microspherocytosis, poikilocytosis, and an unusual thermal sensitivity of red cells.
Sequence similarities	Contains 1 FERM domain.
Post-translational modifications	Phosphorylated at multiple sites by different protein kinases and each phosphorylation event selectively modulates the protein's functions. Phosphorylation on Tyr-660 reduces the ability of 4.1 to promote the assembly of the spectrin/actin/4.1 ternary complex. O-glycosylated; contains N-acetylglucosamine side chains in the C-terminal domain.
Cellular localization	Cytoplasm > cytoskeleton. Cytoplasm > cell cortex. Nucleus.

Images



ab158364 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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