abcam

Product datasheet

Recombinant Human EPB41 protein ab114654

1 Image

Overview

Product name	Recombinant Human EPB41 protein
Protein length	Full length protein

Description

Nature	Recombinant
Source	Wheat germ

Amino Acid Sequence

Accession	P11171
Species	Human
Sequence	MTTEKSLVTEAENSQHQQKEEGEEAINSGQQEPQQEESCQTAAEGDNWCE QKLKASNGDTPTHEDLTKNKERTSESRGLSRLFSSFLKRPKSQVSEEEGK EVESDKEKGEGGQKEIEFGTSLDEEIILKAPIAAPEPELKTDPSLDLHSL SSAETQPAQEELREDPDFEIKEGEGLEECSKIEVKEESPQSKAETELKAS QKPIRKHRNMHCKVSLLDDTVYECVVEKHAKGQDLLKRVCEHLNLLEEDY FGLAIWDNATSKTWLDSAKEIKKQVRGVPWNFTFNVKFYPPDPAQLTEDI TRYYLCLQLRQDIVAGRLPCSFATLALLGSYTIQSELGDYDPELHGVDYV SDFKLAPNQTKELEEKVMELHKSYRSMTPAQADLEFLENAKKLSMYGVDL HKAKDLEGVDIILGVCSSGLLVYKDKLRINRFPWPKVLKISYKRSSFFIK IRPGEQEQYESTIGFKLPSYRAAKKLWKVCVEHHTFFRLTSTDTIPKSKF LALGSKFRYSGRTQAQTRQASALIDRPAPHFERTASKRASRSLDGAAAVD SADRSPRPTSAPAITQGQVAEGGVLDASAKKTVVPKAQKETVKAEVKKED EPPEQAEPEPTEAWKVEKTHIEVTVPTSNGDQTQKKRERLDGENIYIRHS NLMLEDLDKSQEEIKKHHASISELKKNFMESVPEPRPSEWDKRLSTHSPF RTLNINGQIPTGEGVSTLST
Molecular weight	105 kDa including tags
Amino acids	1 to 720

Specifications

Our Abpromise guarantee covers the use of **ab114654** in the following tested applications.

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

Applications	ELISA

	SDS-PAGE Western blot
Additional notes	Protein concentration is above or equal to 0.05 mg/ml. Best used within three months from the date of receipt.

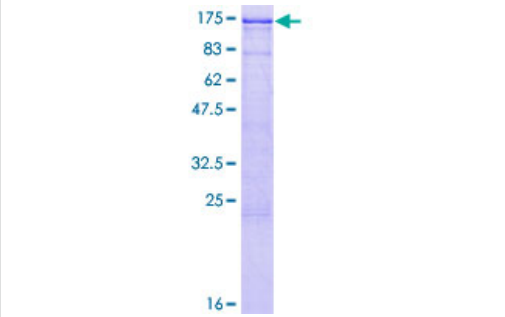
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.3% 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



SDS-PAGE - EPB41 protein (ab114654)

12.5% SDS-PAGE showing ab114654 at approximately 105.27kDa stained with Coomassie Blue.

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