

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 | <p>MTTEKSLVTEAENSQHQQKEEGEEAINSGQQEPQQEESCQTAAEGDNWCE QKLKASNGDTPHEDLTKNKERTSESRGLSRLFSSFLKRPKSQVSEEEGK EVESDKEKGEGGQKEIEFGTSLDEEILKAPIAAPEPELKTDPISLDLHSL SSAETQPAQEELREDPDFEIKEGEGLEECISKIEVKEESPQSKAETELKAS QKPIRKHRNMHCKVSLDDTVYECVVEKHAKGQDLLKRVCEHLNLLLEEDY FGLAIDNATSKTWLDSAKEIKKQVRGVPWNFTFNVKFYPPDPAQLTEDI TRYLCLQLRQDIVAGRLPCSFATLALLGSYTIQSELGDYDPELHGVDYV SDFKLAPNQTKELKVMELHKSYSRSMTPAQADLEFLENAKKLSMYGVDL HKAKDLEGVDIILGVCSSGLLVYKDKLRINRFPWPKVLKISYKRSSFFIK IRPGEQEYESTIGFKLPSYRAAKKLWKCVEHHTFFRLTSTDITIPKSKF LALGSKFRYSGRTQAQTRQASALIDRPAPHFERTASKRASRLDGAAAVD SADRSPRPTSAPAITQGQVAEGGVLDASAKKTVVPAQKQKTVKAEVKKED EPPEQAEPEPTAWKVEKTHIEVTVPTSNGDQTQKKRERLDGENMYRHS NLMLLEDLDSQEEIKKHASISELKKNFMESVPEPRPSEWDKRLSTHSPF RTLNINGQIPTGEGVSTLST</p> |
| 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 -80°C. 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.

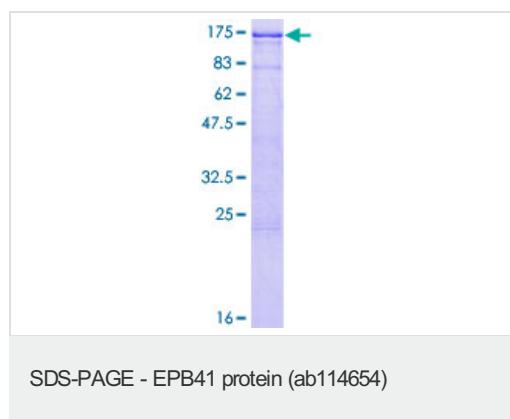
Phosphorylation on Tyr-660 reduces the ability of 4.1 to promote the assembly of the spectrin/actin/4.1 ternary complex.

O-glycosylated; contains N-acetylglucosamine side chains in the C-terminal domain.

Cellular localization

Cytoplasm > cytoskeleton. Cytoplasm > cell cortex. Nucleus.

Images



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

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