

Product datasheet

Recombinant Human EPB41 protein ab114654

1 Image

Description

Product name	Recombinant Human EPB41 protein
Expression system	Wheat germ
Accession	P11171
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human

Sequence

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MTTEKSLVTEAENSQHQQKEEGEEAINSGQQEPQQEESC
QTAAEGDNWCE
QKLKASNGDTPHEDLTKNKERTSESRGLSRLFSSFLKRP
KSQVSEEEGK
EVESDKEKGEGGQKEIEFGTSLDEEILKAPIAAPEPELKT
DPSLDLHSL
SSAETQPAQEELREDPDFEIKEGEGLEECKIEVKEESPQ
SKAETELKAS
QKPIRKHRNMHCKVSLDDTVYECVVEKHAKGQDLLKRV
CEHLNLLLEEDY
FGLAWDNATSKTWLDSAKEIKQVRGVPWNFTFNVKFYP
PDPAQLTEDI
TRYLCLQLRQDIVAGRLPCSFATLALLGSYTIQSELGDYD
PELHGVDYV
SDFKLAPNQTKLEEEKVMELHKSYSRSMTPAQADLEFLEN
AKKLSMYGVDL
HKAKDLEGVDIILGVCSSGLLVYKDKLRINRFPWPKVLKISY
KRSSFFIK
IRPGEQEQYESTIGFKLPSYRAAKKLWKVCVEHHTFFRLTS
TDTIPKSKF
LALGSKFRYSGRTQAQTRQASALIDRPAPHFERTASKRAS
RSLDGAAAVD
SADRSRPTSAPAITQGQVAEGGVLDASAKKTVVPAQK
ETVKAEVKKED
EPPEQAEPEPTEAWKVEKTHIEVTVPTSNGDQTQKKRER
LDGENIYRHS
NLMLELDKSQEEIKKHASISELKKNFMESVPEPRPSE
WDKRLSTHSPFRTLNINGQIPTGEGVSTLST

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Predicted 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
Form	Solid

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
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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.

SDS-PAGE - Recombinant Human EPB41 protein (ab114654)

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