SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-phospho-EPB41 (Tyr418 + Tyr660) antibody

SL13081R

Product Name:	phospho-EPB41 (Tyr418 + Tyr660)
Chinese Name:	磷酸化红The cell membrane条带4.1蛋白抗体
Alias:	EPB41 (phospho Y418 + Y660); EPB41 (phospho Tyr418 + Tyr660); p-EPB41 (Y418 + Y660); p-4p-EPB41 (Tyr418 + Tyr660); 4.1R; 41_HUMAN; Band 4.1; E41P; EL 1; EL1; Elliptocytosis 1; Elliptocytosis 1 RH linked; EPB 4.1; EPB 41; EPB4.1; Epb41; Erythrocyte membrane protein band 4.1 (elliptocytosis 1 RH linked); Erythrocyte membrane protein band 4.1; Erythrocyte surface protein band 4.1; HE; P4.1; Protein 4.1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	97kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human EPB41 around the phosphorylation site of Tyr418 + Tyr660:NI(p-Y)IR
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The 4.1 gene family encodes a group of multifunctional cytoskeletal proteins (4.1R, 4.1G, 4.1N and 4.1B), which are predominantly expressed in the nervous system. 4.1G is a protein that stabilizes spectrin-actin interactions and is associated with hereditary elliptocytosis. Red blood cell 4.1, designated 4.1R, is a multifunctional protein that is essential for maintaining erythrocyte shape and membrane mechanical properties. Both 4.1R and 4.1G are distributed in a unique pattern in the cerebellum and are believed to modulate the membrane mechanical properties of neuronal cells by promoting fodrin/actin association. 4.1N and 4.1B, designated EPB41L1 and EPB41L3, respectively, are strongly expressed in the brain. Antibodies to 4.1N have been reported to detect mulitple forms, each enriched in postsynaptic density preparations relative to brain homogenate. Antibodies to 4.1B have been reported to detect two forms. **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. **Subunit:** Binds with a high affinity to glycophorin and with lower affinity to band III protein. Associates with the nuclear mitotic apparatus. Binds calmodulin, CENPJ and DLG1. Also found to associate with contractile apparatus and tight junctions. **Subcellular Location:** Cytoplasm, cytoskeleton. Cytoplasm, cell cortex. Nucleus. **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. **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. **Similarity:** Contains 1 FERM domain.

	SWISS: P11171 **Gene ID:** 2035 **Database links:** Entrez Gene: 2035Human Omim: 130500Human SwissProt: P11171Human Unigene: 175437Human Unigene: 708933Human Unigene: 712722Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.