

AP55817PU-S**Polyclonal Antibody to EPB41 / Protein 4.1 pTyr660/418 - Aff - Purified**

Alternate names:	4.1R, Band 4.1, E41P, EPB4.1, P4.1
Quantity:	50 µg
Concentration:	1.0 mg/ml
Background:	Elliptocytosis is a hematologic disorder characterized by elliptically shaped erythrocytes and a variable degree of hemolytic anemia. Inherited as an autosomal dominant, elliptocytosis results from mutation in any one of several genes encoding proteins of the red cell membrane skeleton. The form discussed here is the one found in the 1950s to be linked to Rh blood group and more recently shown to be caused by a defect in protein 4.1. 'Rh-unlinked' forms of elliptocytosis are caused by mutation in the alpha-spectrin gene, the beta-spectrin gene, or the band 3 gene.
Uniprot ID:	P11171
NCBI:	NP_001159477.1
GeneID:	2035
Host:	Rabbit
Immunogen:	Peptide sequence around phosphorylation site of tyrosine 660/418 (N-I-Y(p)-I-R) derived from Human EPB41 (KLH-conjugated)
Format:	State: Liquid Ig fraction Purification: Affinity chromatography using epitope-specific peptide Buffer System: Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Applications:	Western blot: 1:500~1:1000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	60 kDa
Specificity:	The antibody detects endogenous levels of EPB41 only when phosphorylated at tyrosine 660/418.
Species Reactivity:	Tested: Human, Mouse
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Conboy J, Kan YW, Shohet SB, Mohandas N. Molecular cloning of protein 4.1, a major structural element of the human erythrocyte membrane skeleton. Proc Natl Acad Sci U S A. 1986 Dec;83(24):9512-6. PubMed PMID: 3467321. 2. Tang TK, Leto TL, Marchesi VT, Benz EJ. Expression of specific isoforms of protein 4.1 in erythroid and non-erythroid tissues. Adv Exp Med Biol. 1988;241:81-95. PubMed PMID: 3223413. 3. Tang TK, Leto TL, Correas I, Alonso MA, Marchesi VT, Benz EJ. Selective expression

of an erythroid-specific isoform of protein 4.1. Proc Natl Acad Sci U S A. 1988 Jun;85(11):3713-7. PubMed PMID: 3375238.

Pictures:

Western blot analysis of extracts from HepG2 cells treated with PMA using EPB41 (Phospho-Tyr660/418) Antibody AP55817PU-N. The lane on the right is treated with the antigen-specific peptide.

