

## EPB41 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant EPB41.

Catalog # AT1922a

### Product Information

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<b>Application</b>	WB, IHC, IF, E
<b>Primary Accession</b>	<a href="#">P11171</a>
<b>Other Accession</b>	<a href="#">BC039079</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG1 Kappa
<b>Clone Names</b>	3D9
<b>Calculated MW</b>	97017

### Additional Information

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<b>Gene ID</b>	2035
<b>Other Names</b>	Protein 41, P41, 41R, Band 41, EPB41, EPB41, E41P
<b>Target/Specificity</b>	EPB41 (AAH39079, 116 a.a. ~ 225 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 E~~N/A
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	EPB41 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

### Background

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The protein encoded by this gene, together with spectrin and actin, constitute the red cell membrane cytoskeletal network. This complex plays a critical role in erythrocyte shape and deformability. Mutations in this gene are associated with type 1 elliptocytosis (EL1). Alternatively spliced transcript variants encoding different isoforms have been described for this gene.

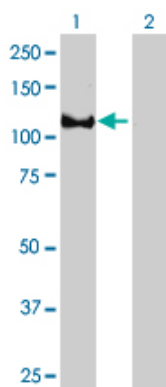
### References

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Identification of SNP markers on 1p36 and association analysis of EPB41 with mandibular prognathism in a Chinese population. Xue F, et al. Arch Oral Biol, 2010 Aug 24. PMID 20797695. Protein 4.2 binds to the carboxyl-terminal EF-hands of erythroid alpha-spectrin in a calcium- and calmodulin-dependent manner.

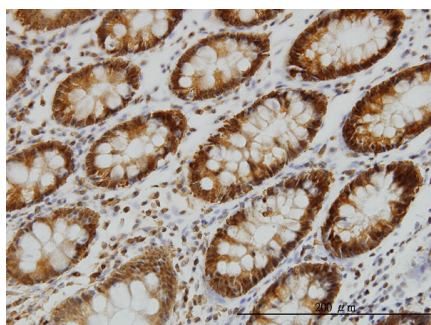
Korsgren C, et al. J Biol Chem, 2010 Feb 12. PMID 20007969. Coupled transcription-splicing regulation of mutually exclusive splicing events at the 5' exons of protein 4.1R gene. Huang SC, et al. Blood, 2009 Nov 5. PMID 19729518. Solution structure and glycophorin C binding studies of the protein 4.1R FERM alpha-lobe domain. Kusunoki H, et al. Proteins, 2009 Jul. PMID 19338061. Alternatively spliced exon 5 of the FERM domain of protein 4.1R encodes a novel binding site for erythrocyte p55 and is critical for membrane targeting in epithelial cells. Seo PS, et al. Biochim Biophys Acta, 2009 Feb. PMID 18952129.

## Images

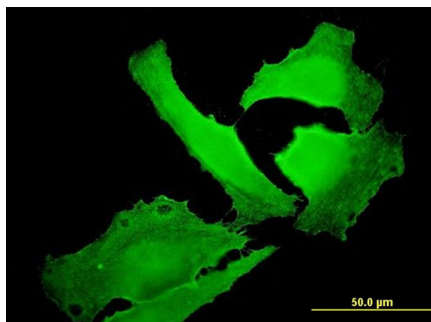


Western Blot analysis of EPB41 expression in transfected 293T cell line by EPB41 monoclonal antibody (M01), clone 3D9.

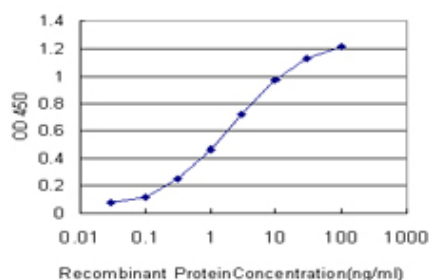
Lane 1: EPB41 transfected lysate (81 KDa).  
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to EPB41 on formalin-fixed paraffin-embedded human colon. [antibody concentration 3 ug/ml]



Immunofluorescence of monoclonal antibody to EPB41 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged EPB41 is approximately 0.03ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.