

**EPB49 antibody - middle region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI14706****Specification**

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**EPB49 antibody - middle region - Product Information**

Application	WB
Primary Accession	<a href="#">Q08495</a>
Other Accession	<a href="#">NM_001978</a> , <a href="#">NP_001969</a>
Reactivity	Human, Mouse, Rat, Pig, Horse, Bovine, Guinea Pig, Dog
Predicted	Human, Rat, Pig, Horse, Bovine, Guinea Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45kDa kDa

**EPB49 antibody - middle region - Additional Information****Gene ID 2039**

Alias Symbol **DMT, FLJ78462, FLJ98848, EPB49**

**Other Names**

Dematin, Dematin actin-binding protein, Erythrocyte membrane protein band 4.9, DMTN, DMT, EPB49

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 50 ul of distilled water. Final anti-EPB49 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

EPB49 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

**EPB49 antibody - middle region - Protein Information**

**Name** DMTN

**Synonyms** DMT, EPB49

**Function**

Membrane-cytoskeleton-associated protein with F-actin-binding activity that induces F-actin bundles formation and stabilization. Its F-actin-bundling activity is reversibly regulated upon its phosphorylation by the cAMP-dependent protein kinase A (PKA). Binds to the erythrocyte membrane glucose transporter-1 SLC2A1/GLUT1, and hence stabilizes and attaches the

spectrin-actin network to the erythrocytic plasma membrane. Plays a role in maintaining the functional integrity of PKA-activated erythrocyte shape and the membrane mechanical properties. Also plays a role as a modulator of actin dynamics in fibroblasts; acts as a negative regulator of the RhoA activation pathway. In platelets, functions as a regulator of internal calcium mobilization across the dense tubular system that affects platelet granule secretion pathways and aggregation. Also required for the formation of a diverse set of cell protrusions, such as filopodia and lamellipodia, necessary for platelet cell spreading, motility and migration. Acts as a tumor suppressor and inhibits malignant cell transformation.

#### **Cellular Location**

Cytoplasm. Cytoplasm, cytosol. Cytoplasm, perinuclear region. Cytoplasm, cytoskeleton. Cell membrane. Membrane. Endomembrane system. Cell projection. Note=Localized at the spectrin-actin junction of erythrocyte plasma membrane. Localized to intracellular membranes and the cytoskeletal network. Localized at intracellular membrane-bounded organelle compartment in platelets that likely represent the dense tubular network membrane. Detected at the cell membrane and at the parasitophorous vacuole in malaria-infected erythrocytes at late stages of plasmodium berghei or falciparum development

#### **Tissue Location**

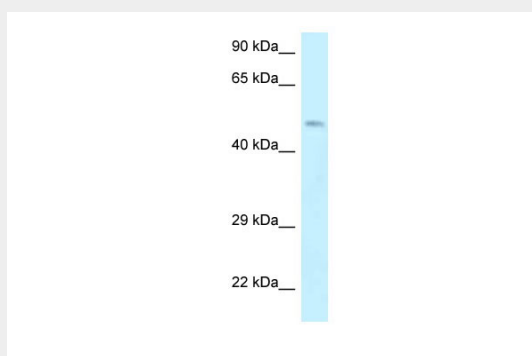
Expressed in platelets (at protein level). Expressed in heart, brain, lung, skeletal muscle, and kidney

### **EPB49 antibody - middle region - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **EPB49 antibody - middle region - Images**



WB Suggested Anti-EPB49 Antibody Titration: 1.0 µg/ml  
Positive Control: Jurkat Whole Cell

### **EPB49 antibody - middle region - References**

Rana A.P., et al. Proc. Natl. Acad. Sci. U.S.A. 90:6651-6655(1993).

Azim A.C., et al. J. Biol. Chem. 270:17407-17413(1995).  
Ota T., et al. Nat. Genet. 36:40-45(2004).  
Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.  
Nusbaum C., et al. Nature 439:331-335(2006).