# 4.1R Rabbit pAb

CatalogNo: YT0017 Orthogonal Validated

## Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse

Applications
- WB,ELISA

MW
- 60kD (Observed)

Isotype
- IgG

## Recommended Dilution Ratios

**WB 1:500-1:2000**
**ELISA 1:5000**
**Not yet tested in other applications.**

## Storage

| | |
|---|---|
| **Storage*** | -15°C to -25°C/1 year(Do not lower than -25°C) |
| **Formulation** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |

## Basic Information

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|---|---|
| **Clonality** | Polyclonal |

## Immunogen Information

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|---|---|
| **Immunogen** | The antiserum was produced against synthesized peptide derived from human EPB41. AA range:626-675 |
| **Specificity** | 4.1R Polyclonal Antibody detects endogenous levels of 4.1R protein. |

## Target Information

**Gene name** EPB41

**Protein Name** Protein 4.1

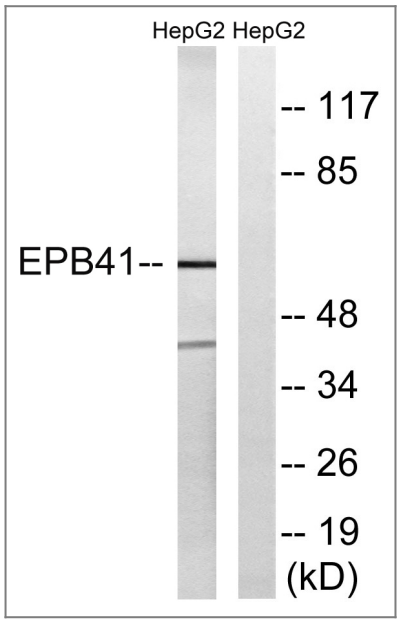
| Organism | Gene ID | UniProt ID |
|---|---|---|
| Human | 2035; | P11171; |
| Mouse | 269587; | P48193; |

**Cellular Localization** Cytoplasm, cytoskeleton . Cytoplasm, cell cortex . Nucleus .

**Tissue specificity** Brain,PCR rescued clones,Reticulocyte,Spleen,

**Function** Disease: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.,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.,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.,PTM:O-glycosylated; contains N-acetylglucosamine side chains in the C-terminal domain.,PTM:Phosphorylated at multiple sites by different protein kinases and each phosphorylation event selectively modulates the protein's functions.,PTM:Phosphorylation on Tyr-660 reduces the ability of 4.1 to promote the assembly of the spectrin/actin/4.1 ternary complex.,similarity:Contains 1 FERM domain.,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.,

## Validation Data




Western blot analysis of lysates from HepG2 cells treated with PMA 125ng/ml 30', using EPB41 Antibody. The lane on the right is blocked with the synthesized peptide.

## Contact information


| | |
|---|---|
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