

# MPP1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant MPP1.

Catalog # AT2894a

## Product Information

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|--------------------------|--------------------------|
| <b>Application</b>       | WB, E                    |
| <b>Primary Accession</b> | <a href="#">Q00013</a>   |
| <b>Other Accession</b>   | <a href="#">BC002392</a> |
| <b>Reactivity</b>        | Human                    |
| <b>Host</b>              | mouse                    |
| <b>Clonality</b>         | monoclonal               |
| <b>Isotype</b>           | IgG1 Kappa               |
| <b>Clone Names</b>       | 1C3-1D11                 |
| <b>Calculated MW</b>     | 52296                    |

## Additional Information

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|---------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>            | 4354                                                                                                               |
| <b>Other Names</b>        | 55 kDa erythrocyte membrane protein, p55, Membrane protein, palmitoylated 1, MPP1, DXS552E, EMP55                  |
| <b>Target/Specificity</b> | MPP1 (AAH02392, 1 a.a. ~ 466 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| <b>Dilution</b>           | WB~~1:500~1000 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>        | MPP1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Background

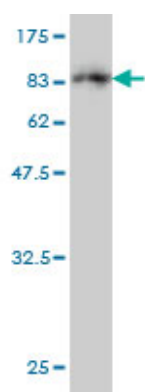
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This gene encodes the prototype of the membrane-associated guanylate kinase (MAGUK) family proteins. MAGUKs interact with the cytoskeleton and regulate cell proliferation, signaling pathways, and intercellular junctions. The encoded protein is an extensively palmitoylated membrane phosphoprotein containing a PDZ domain, a Src homology 3 (SH3) motif, and a guanylate kinase domain. This gene product interacts with various cytoskeletal proteins and cell junctional proteins in different tissue and cell types, and may be involved in the regulation of cell shape, hair cell development, neural patterning of the retina, and apico-basal polarity and tumor suppression pathways in non-erythroid cells. Multiple transcript variants encoding different isoforms have been found for this gene.

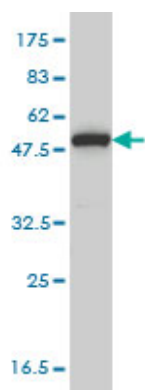
## References

Identification of erythrocyte p55/MPP1 as a binding partner of NF2 tumor suppressor protein/Merlin. Seo PS, et al. *Exp Biol Med* (Maywood), 2009 Mar. PMID 19144871. 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. MPP1 links the Usher protein network and the Crumbs protein complex in the retina. Gosens I, et al. *Hum Mol Genet*, 2007 Aug 15. PMID 17584769. Solution structure of human erythroid p55 PDZ domain. Kusunoki H, et al. *Proteins*, 2006 Aug 15. PMID 16741958. Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. *Genome Res*, 2006 Jan. PMID 16344560.

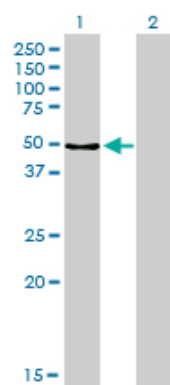
## Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (77 KDa) .



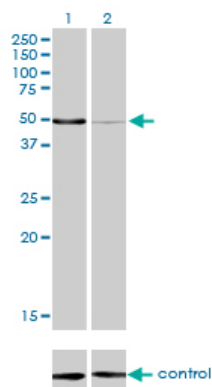
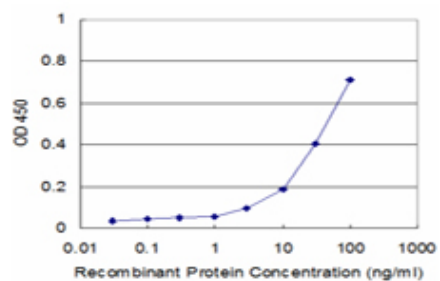
MPP1 monoclonal antibody (M02), clone 1E11-1G11  
Western Blot analysis of MPP1 expression in K-562 ( (Cat # AT2894a )



Western Blot analysis of MPP1 expression in transfected 293T cell line by MPP1 monoclonal antibody (M02), clone 1C3-1D11.

Lane 1: MPP1 transfected lysate(52.3 KDa).  
Lane 2: Non-transfected lysate.

Detection limit for recombinant GST tagged MPP1 is approximately 3ng/ml as a capture antibody.



Western blot analysis of MPP1 over-expressed 293 cell line, cotransfected with MPP1 Validated Chimera RNAi (Cat # AT2894a )

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