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# PPP1R1B Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1879a

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | Q9UD71 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 2A4G9 |
| **Isotype** | IgG1 |
| **Calculated MW** | 22963 |
| **Description** | This gene encodes a bifunctional signal transduction molecule. Dopaminergic and glutamatergic receptor stimulation regulates its phosphorylation and function as a kinase or phosphatase inhibitor. As a target for dopamine, this gene may serve as a therapeutic target for neurologic and psychiatric disorders. Multiple transcript variants encoding different isoforms have been found for this gene. |
| **Immunogen** | Purified recombinant fragment of human PPP1R1B (AA: 95-204) expressed in E. Coli. |
| **Formulation** | Purified antibody in PBS with 0.05% sodium azide |

## Additional Information

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| **Gene ID** | 84152 |
| **Other Names** | Protein phosphatase 1 regulatory subunit 1B, DARPP-32, Dopamine- and cAMP-regulated neuronal phosphoprotein, PPP1R1B, DARPP32 |
| **Dilution** | WB~~1/500 - 1/2000 E~~1/10000 |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | PPP1R1B Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | PPP1R1B |
| **Synonyms** | DARPP32 |

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| **Function** | Inhibitor of protein-phosphatase 1. |
| **Cellular Location** | Cytoplasm. |

## Background

This gene encodes a common acute lymphocytic leukemia antigen that is an important cell surface marker in the diagnosis of human acute lymphocytic leukemia (ALL). This protein is present on leukemic cells of pre-B phenotype, which represent 85% of cases of ALL. This protein is not restricted to leukemic cells, however, and is found on a variety of normal tissues. It is a glycoprotein that is particularly abundant in kidney, where it is present on the brush border of proximal tubules and on glomerular epithelium. The protein is a neutral endopeptidase that cleaves peptides at the amino side of hydrophobic residues and inactivates several peptide hormones including glucagon, enkephalins, substance P, neurotensin, oxytocin, and bradykinin. This gene, which encodes a 100-kD type II transmembrane glycoprotein, exists in a single copy of greater than 45 kb. The 5' untranslated region of this gene is alternatively spliced, resulting in four separate mRNA transcripts. The coding region is not affected by alternative splicing. ; ;

## References

1. Med Mol Morphol. 2011 Dec;44(4):190-9. 2. Breast Cancer Res Treat. 2010 Feb;120(1):47-57.

## Images

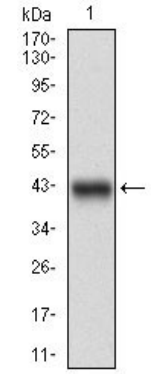



Figure 1: Western blot analysis using PPP1R1B mAb against human PPP1R1B (AA: 95-204) recombinant protein. (Expected MW is 38.3 kDa)

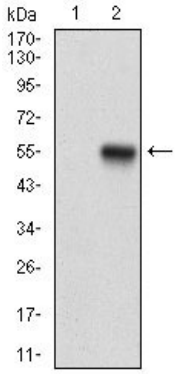



Figure 2: Western blot analysis using PPP1R1B mAb against HEK293 (1) and PPP1R1B (AA: 95-204)-hIgGFc transfected HEK293 (2) cell lysate.

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