



# Rabbit Anti-Human DARPP-32 monoclonal antibody, clone L.046.5 (CABT-L1539)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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| Target             | PPP1R1B  |
| Immunogen          | Synthetic peptide corresponding to residues surrounding Glu160 of human DARPP-32 |
| Isotype            | IgG  |
| Source/Host        | Rabbit   |
| Species Reactivity | Human, Mouse, Rat  |
| Clone              | L.046.5  |
| Purification       | Affinity Purified  |
| Conjugate          | Unconjugated   |
| Applications       | IHC-P, IP, IF, WB  |
| Format             | Liquid   |
| Buffer             | 0.01M HEPES, pH 7.5, with 0.15M NaCl, 100µg/ml BSA, 50% glycerol                 |
| Preservative       | None   |
| Storage            | -20°C  |

## BACKGROUND

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| Introduction | Midbrain dopaminergic neurons play a critical role in multiple brain functions, and abnormal signaling through dopaminergic pathways has been implicated in several major neurologic and |
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psychiatric disorders. One well-studied target for the actions of dopamine is DARPP32. In the densely dopamine- and glutamate-innervated rat caudate-putamen, DARPP32 is expressed in medium-sized spiny neurons. Dopamine D1 receptor stimulation enhances cAMP formation, resulting in the phosphorylation of DARPP32. NMDA receptor stimulation elevates intracellular calcium, which leads to activation of calcineurin and dephosphorylation of phospho-DARPP32, thereby reducing the phosphatase-1 inhibitory activity of DARPP32.

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| <b>Keywords</b> | PPP1R1B;protein phosphatase 1, regulatory (inhibitor) subunit 1B;DARPP32;DARPP-32;protein phosphatase 1 regulatory subunit 1B;dopamine and cAMP-regulated neuronal phosphoprotein 32 |
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## GENE INFORMATION

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| Entrez Gene ID | <a href="#">84152</a> |
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| UniProt ID | <a href="#">Q9UD71</a> |
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