

## Anti-Phospho-Thr34 DARPP-32 Antibody

Product Data Sheet · P/N 74086 Rev 01 · Reissued 2026-09-19 (layout only)

| Product code | Pack size           |
|--------------|---------------------|
| P40004-100   | 100 µL              |
| Host Species | Rabbit (Polyclonal) |
| Mr (kDa)     | 32                  |

### Description

DARPP-32 is a dopamine (DA) and cAMP- regulated ~32k phosphoprotein that is associated with dopaminoceptive neurons (Fienberg et al., 1998). The protein inhibits protein phosphatase I when it is phosphorylated on Thr34. In contrast, when DARPP-32 is phosphorylated on Thr75 the protein acts as an inhibitor of PKA (Bibb et al., 1999). Phosphorylation of DARPP-32 is thought to play a critical role in the regulation of dopaminergic neurotransmission. In addition, the activity of DARPP-32 is also thought to play important roles in the actions of alcohol, caffeine and Prozac® (Maldve et al., 2002; Lindskog et al., 2002; Svenningsson et al., 2002).

### Immunogen

Phosphopeptide corresponding to amino acid residues surrounding the phospho- Thr34 of rat DARPP-32.

### Species Reactivity

The antibody has been directly tested for reactivity in Western blots with rat tissue. It is anticipated that the antibody will react with bovine, canine, chicken, human, mouse, and non-human primates based on the fact that these species have 100% homology with the amino acid sequence used as antigen.

### Physical State

Liquid; Buffer contents: 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per mL BSA and 50% glycerol

### Purification Method

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

### Recommended Antibody Dilutions

WB: 1:1000

### Storage/Stability

Stable at -20 °C for at least 1 year.

For long term storage -20 °C is recommended

### Shipping Conditions

**Domestic:** Blue Ice

**International:** Blue Ice or Dry Ice

### References

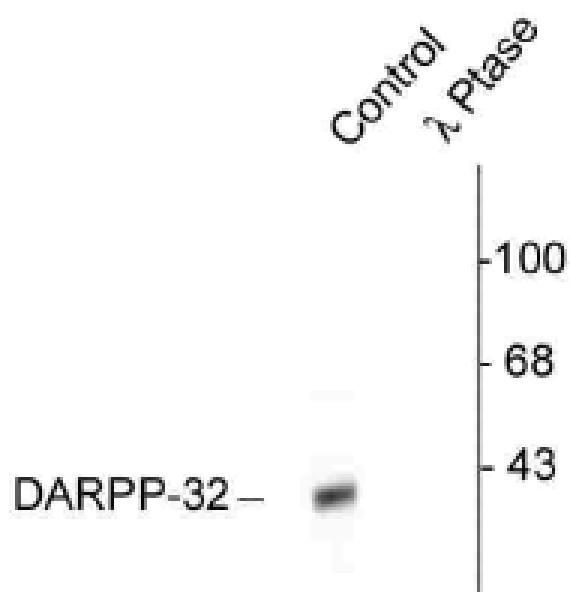
- 1) Bibb JA et al. (1999) Nature (London) 402:669-671.
- 2) Fienberg, AA et al. (1998) Science 281:838-842.
- 3) Lindskog M et al. (2002) Nature (London) 418:774-778.
- 4) Maldve RE et al. (2002) Nature Neurosci 5:641-

648.

5) Svenningsson P et al. (2002) Proc Natl Acad Sci USA 99:3182-3187.



Western Blot Rat caudate lysate showing specific immunolabeling of the ~32k DARPP-32 phosphorylated at Thr34 (Control). Immunolabeling is completely eliminated by treatment with  $\lambda$ - phosphatase shown in lane 2.



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