

#2611 Store at -20°C

Phospho-PRK1 (Thr774)/PRK2 (Thr816) Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source: | UniProt ID: | Entrez-Gene Id: |
|---------------|-------------|--------------|-------------------------------------|---------|------------------|-----------------|
| WB | H M R | Endogenous | 120 Phospho-PRK1. 140 Phospho-PRK2. | Rabbit | #Q16512, #Q16513 | 5585, 5586 |

| Product Usage Information | Application | Dilution |
|----------------------------------|---|----------|
| | Western Blotting | 1:1000 |
| Storage | Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody. | |
| Specificity / Sensitivity | Phospho-PRK1 (Thr774)/ PRK2 (Thr816) Antibody detects endogenous levels of PRK1 and PRK2 only when phosphorylated at Thr774 or Thr816, respectively. This antibody also detects PKC zeta and lambda when phosphorylated at Thr 410 and 403, respectively. | |
| Source / Purification | Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Thr774 of human PRK1. Antibodies are purified by protein A and peptide affinity chromatography. | |
| Background | The protein kinase C-related kinases (PRKs) are a subfamily of Ser/Thr-specific kinases with a catalytic domain highly homologous to the PKC family (1-3). They are effectors of Rho family GTPases (4-6) and are activated by fatty acids and phospholipids <i>in vitro</i> (7,8). Activation <i>in vitro</i> and <i>in vivo</i> involves the activation loop phosphorylation of PRK1 (Thr774)/PRK2 (Thr816) by PDK1 (9,10). | |
| Background References | <ol style="list-style-type: none"> 1. Mukai, H. et al. (1994) <i>Biochem. Biophys. Res. Commun.</i> 199, 897-904. 2. Morrice, N.A. et al. (1994) <i>J. Biol. Chem.</i> 269, 20040-20046. 3. Palmer, R.H. et al. (1994) <i>FEBS Lett.</i> 356, 5-8. 4. Watanabe, G. et al. (1996) <i>Science</i> 271, 645-648. 5. Amano, M. et al. (1996) <i>Science</i> 271, 648-650. 6. Vincent, S. and Settleman, J. (1997) <i>Mol. Cell. Biol.</i> 17, 2247-2256. 7. Morrice, N.A. et al. (1994) <i>FEBS Lett.</i> 351, 171-175. 8. Palmer, R.H. et al. (1995) <i>J. Biol. Chem.</i> 270, 22412-22416. 9. Flynn, P. et al. (2000) <i>J. Biol. Chem.</i> 275, 11064-70. 10. Dong, L.Q. et al. (2000) <i>Proc. Natl. Acad. Sci. USA</i> 97, 5089-94. | |

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| Species Reactivity | Species reactivity is determined by testing in at least one approved application (e.g., western blot). |
| Western Blot Buffer | IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight. |
| Applications Key | WB: Western Blotting |
| Cross-Reactivity Key | H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected |
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