

#11993 Store at -20°C

Phospho-KIF1B (Ser1487) Antibody


Cell Signaling
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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, IP | H | Endogenous | 140, 200 | Rabbit | #O60333 | 23095 |

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| Product Usage Information | Application Western Blotting Immunoprecipitation | Dilution 1:1000 1:50 |
| 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-KIF1B (Ser1487) Antibody recognizes endogenous levels of KIF1B protein only when phosphorylated at Ser1487. | |
| Species predicted to react based on 100% sequence homology: | Mouse, Rat, Monkey | |
| Source / Purification | Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser1487 of human KIF1B protein. Antibodies are purified by protein A and peptide affinity chromatography. | |
| Background | Kinesin-like protein KIF1B is a member of the kinesin 3 family of C-kinesins that are characterized by a kinesin-motor domain in the carboxy-terminal region. As part of the general mechanism of kinesin-mediated cellular transport, C-kinesins are known to drive microtubule plus and minus end motilities (1-3). KIF1B is implicated in the transport of synaptic proteins to the cell periphery in neuronal cell axons by interaction with Rab3 guanine nucleotide exchange factor (3). Mitochondria are also often transported in axons by KIF1B (3-4). Quantitative mass spectrometry profiling of mitotic phosphorylation revealed putative phosphorylation sites of KIF1B (5). Phospho-KIF1B (Ser1487) Antibody is directed at a site identified by Cell Signaling Technology® (CST) using PhosphoScan®, CST's LC-MS/MS platform for modification site discovery. Phosphorylation at Ser1487 was discovered using an Akt substrate antibody. Please visit PhosphoSitePlus®, CST's modification site knowledgebase, at www.phosphosite.org for more information. | |
| Background References | 1. Hirokawa, N. et al. (1998) <i>Curr Opin Cell Biol</i> 10, 60-73. 2. Dagenbach, E.M. and Endow, S.A. (2004) <i>J Cell Sci</i> 117, 3-7. 3. Hirokawa, N. et al. (2009) <i>Nat Rev Mol Cell Biol</i> 10, 682-96. 4. Wozniak, M.J. et al. (2005) <i>BMC Cell Biol</i> 6, 35. 5. Dephore, N. et al. (2008) <i>Proc Natl Acad Sci U S A</i> 105, 10762-7. | |

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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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight. |
| Applications Key | WB: Western Blotting IP: Immunoprecipitation |
| 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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