

Lysate Preparation

LIM kinases (LIMK1 and LIMK2) are serine/threonine kinases that have two zinc finger motifs, known as LIM motifs, in their amino-terminal regulatory domains. LIM kinases are involved in actin cytoskeletal regulation downstream of Rho-family GTPases, PAKs, and ROCK. PAK1 and ROCK phosphorylate LIMK1 or LIMK2 at the conserved Thr-508 or Thr-505 residues in the activation loop, increasing LIMK activity. In addition, VEGF-induced stress fiber formation has been linked to p38-mediated activation of LIMK through MK-2 phosphorylation of Ser-323. Activated LIM kinases inhibit the actin depolymerization activity of cofilin by phosphorylation at the amino-terminal Ser-3 residue of cofilin.

An activated His-tagged mouse LIMK1 contains Thr-508 phosphorylation. The phosphorylated kinase is detected by anti-LIMK1 (N-terminus) Cat.# LP1831 and anti-LIMK1 (Thr-508) Cat.# LP1891. This activated kinase can be dephosphorylated at Thr-508 by treating with I-phosphatase for 30 min. at 37°C.

Buffer and Storage

LIMK (activated) + lambda phosphatase Lysate is supplied at a concentration of 2 ng/ μ l in electrophoresis sample buffer (62.5 mM Tris pH 6.8, 2% SDS, 5% glycerol, 0.003% bromophenol blue, 0.9% β -mercaptoethanol). Store at -20°C. Do not boil or dilute. Stable for 1 year.

Applications

WB 10 μ l/lane

End user should determine optimal quantity for their particular applications and experiments.

Related Products

- LP1831 LIMK1 (C-terminus) Rabbit Polyclonal
- LP1891 LIMK1 (Thr-508)|LIMK2 (Thr-505), phospho-specific Rabbit Polyclonal
- CP1131 Cofilin 1 (N-terminus) Rabbit Polyclonal
- CP1151 Cofilin 1 (Ser-3), phospho-specific Rabbit Polyclonal

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