

**Anti-LIMK1 (Thr-508) [LIMK2 (Thr-505), Phosphospecific Antibody**  
Catalog # AN1835**Specification****Anti-LIMK1 (Thr-508) [LIMK2 (Thr-505), Phosphospecific Antibody - Product Information**

Primary Accession	<a href="#">P53667</a>
Reactivity	<b>Bovine</b>
Host	<b>Rabbit</b>
Clonality	<b>Rabbit Polyclonal</b>
Isotype	<b>IgG</b>
Calculated MW	<b>72585</b>

**Anti-LIMK1 (Thr-508) [LIMK2 (Thr-505), Phosphospecific Antibody - Additional Information**

Gene ID	<b>3984</b>
<b>Other Names</b>	
LIMK	

**Target/Specificity**

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. In addition, LIMKs may have a function in the nucleus. It has been shown that the nuclear localization of LIMKs can mediate suppression of Rac/Cdc42-mediated cyclin D1 expression. This effect of LIMKs was independent of cofilin phosphorylation and the regulation of actin dynamics.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Anti-LIMK1 (Thr-508) [LIMK2 (Thr-505), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

Blue Ice

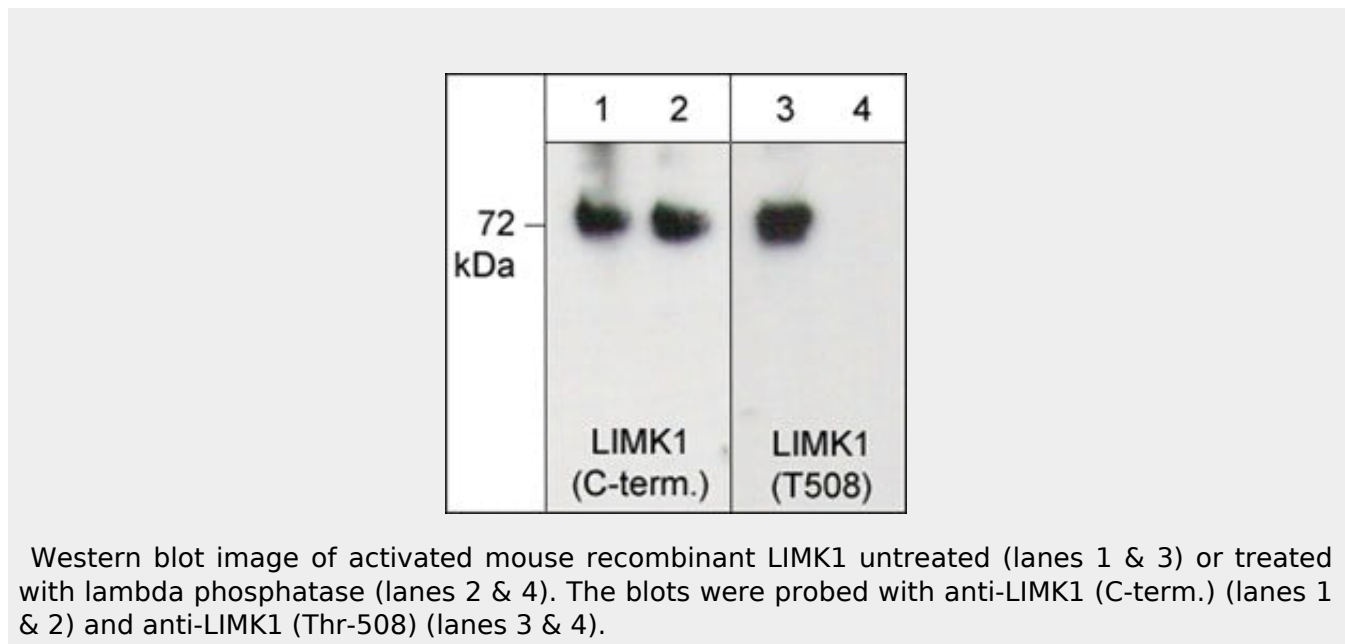
**Anti-LIMK1 (Thr-508) [LIMK2 (Thr-505), Phosphospecific Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-LIMK1 (Thr-508) [LIMK2 (Thr-505), Phosphospecific Antibody - Images



Western blot image of activated mouse recombinant LIMK1 untreated (lanes 1 & 3) or treated with lambda phosphatase (lanes 2 & 4). The blots were probed with anti-LIMK1 (C-term.) (lanes 1 & 2) and anti-LIMK1 (Thr-508) (lanes 3 & 4).

#### Anti-LIMK1 (Thr-508) [LIMK2 (Thr-505), Phosphospecific Antibody - Background

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. In addition, LIMKs may have a function in the nucleus. It has been shown that the nuclear localization of LIMKs can mediate suppression of Rac/Cdc42-mediated cyclin D1 expression. This effect of LIMKs was independent of cofilin phosphorylation and the regulation of actin dynamics.