

AP02415PU-S**Polyclonal Antibody to LIMK2 pThr505 - Aff - Purified****Alternate names:**

EC=2.7.11.1, LIM domain kinase 2, LIMK-2, LIMK2

Quantity:

50 µg

Concentration:

1.0 mg/ml

Background:

LIM kinases (LIM kinase 1 and LIM kinase 2) are serine/threonine kinases that have two zinc finger motifs, known as LIM motifs in their N terminal regulatory domain. LIM kinases are involved in actin cytoskeleton regulation through Rho family GTPases and downstream kinases PAKs and ROCK. PAK1 and ROCK phosphorylate LIM kinase 1 and LIM kinase 2, which increases the activity of the kinases. Activated LIM kinases inhibit the actin depolymerization activity of cofilin by phosphorylation at the N terminus of Cofilin.

Uniprot ID:[P53671](#)**NCBI:**[NP_005560.1](#)**GeneID:**[3985](#)**Host:**

Rabbit

Immunogen:

The antiserum was produced against synthesized phosphopeptide derived from human LIMK2 around the phosphorylation site of threonine 505 (R-Y-TP-V-V).

Format:**State:** Liquid purified Ig fraction.

Purification: Affinity Chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

Buffer System: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol.

Applications:

Western Blot: 1/500-1/1000.

Immunofluorescence: 1/100-1/200.

Immunohistochemistry on Paraffin Sections: 1/50-1/100.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody detects endogenous levels of LIMK2 only when phosphorylated at Threonine 505.

Species: Human, Rat and Mouse.

Other species not tested.

Storage:

Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Shelf life: One year from despatch.

General Readings:

1. Soosairajah J, et al. (2005) EMBO J.
2. Ohashi K, et al. (2000) J Biol Chem; 275(5): 3577-82.
3. Edwards DC, et al. (1999) Nat Cell Biol; 1(5): 253-9.

Pictures:

Figure 1. Immunohistochemical analysis of paraffin- embedded human breast carcinoma tissue using LIMK2 (phospho-Thr505) antibody (#AP02415PU).

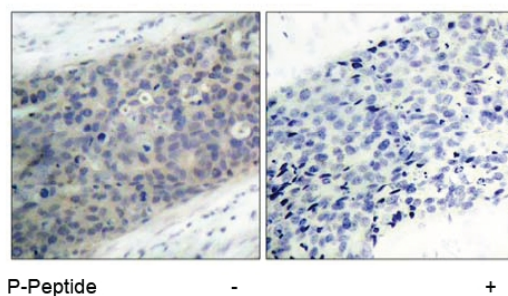


Figure 3. Immunofluorescence staining of methanol-fixed HeLa cells using LIMK2 (phospho-Thr505) antibody (#AP02415PU, Red).

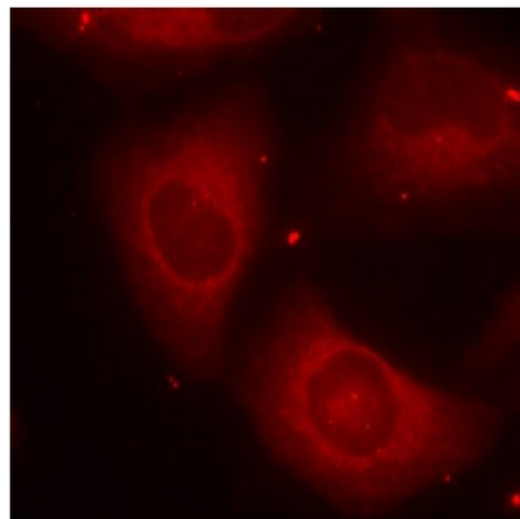


Figure 2. Western blot analysis of extract from NIH/3T3 cells treated or untreated with UV (60 min), using LIMK2 (phospho-Thr505) antibody (AP02415PU).

