



Rabbit Anti-phospho-LIM Kinase 2 (Thr505) antibody

SL18257R

Product Name:	phospho-LIM Kinase 2 (Thr505)
Chinese Name:	磷酸化单丝氨酸蛋白激酶2抗体
Alias:	LIM Kinase 1 (phospho T505); p-LIM Kinase 1 (phospho T505); LIM domain kinase 2; LIMK 2; LIMK-2; LIMK2; LIMK2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Zebrafish,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	70kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human LIM Kinase 1 around the phosphorylation site of Thr505:RY(p-T)VV
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	There are approximately 40 known eukaryotic LIM proteins, so named for the LIM domains they contain. LIM domains are highly conserved cysteine-rich structures

containing 2 zinc fingers. Although zinc fingers usually function by binding to DNA or RNA, the LIM motif probably mediates protein-protein interactions. LIM kinase-1 and LIM kinase-2 belong to a small subfamily with a unique combination of 2 N-terminal LIM motifs and a C-terminal protein kinase domain. The protein encoded by this gene is phosphorylated and activated by ROCK, a downstream effector of Rho, and the encoded protein, in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity. It is thought that this pathway contributes to Rho-induced reorganization of the actin cytoskeleton. At least three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Function:

Displays serine/threonine-specific phosphorylation of myelin basic protein and histone (MBP) in vitro.

Subcellular Location:

Cytoplasm. Nucleus. Isoform LIMK2a is distributed in the cytoplasm and the nucleus and Cytoplasm. Nucleus. Isoform LIMK2b occurs mainly in the cytoplasm and is scarcely translocated to the nucleus.

Tissue Specificity:

Highest expression in the placenta; moderate level in liver, lung, kidney, and pancreas. LIMK2a is found to be more abundant than LIMK2b in liver, colon, stomach, and spleen, while in brain, kidney, and placenta LIMK2b is the dominant form. In adult lung, both LIMK2a and LIMK2b is nearly equally observed.

Post-translational modifications:

Phosphorylated on serine and/or threonine residues by ROCK1.

Similarity:

Belongs to the protein kinase superfamily.
TKL Ser/Thr protein kinase family.
Contains 2 LIM zinc-binding domains.
Contains 1 PDZ (DHR) domain.
Contains 1 protein kinase domain.

SWISS:

P53671

Gene ID:

3985

Database links:

[Entrez Gene: 3985](#) Human

[Entrez Gene: 16886](#) Mouse

[Entrez Gene: 29524](#) Rat

[Omim: 601988](#) Human

[SwissProt: P53671](#) Human

[SwissProt: O54785](#) Mouse

[SwissProt: P53670](#) Rat

[Unigene: 474596](#) Human

[Unigene: 124176](#) Mouse

[Unigene: 390323](#) Mouse

[Unigene: 442189](#) Mouse

[Unigene: 11013](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.