

Product datasheet for **CF503012**

LIM Kinase 1 (LIMK1) Mouse Monoclonal Antibody [Clone ID: OTI6B4]

Product data:

| | |
|-------------------------|--|
| Product Type: | Primary Antibodies |
| Clone Name: | OTI6B4 |
| Applications: | FC, IF, IHC, WB |
| Recommended Dilution: | WB 1:500~2000, IHC 1:150, IF 1:100, FLOW 1:100 |
| Reactivity: | Human, Dog, Rat, Monkey, Mouse |
| Host: | Mouse |
| Isotype: | IgG2a |
| Clonality: | Monoclonal |
| Immunogen: | Full length human recombinant protein of human LIMK1(NP_002305) produced in HEK293T cell. |
| Formulation: | Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose) |
| Reconstitution Method: | For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific) |
| Purification: | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G) |
| Conjugation: | Unconjugated |
| Storage: | Store at -20°C as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Predicted Protein Size: | 72.4 kDa |
| Gene Name: | Homo sapiens LIM domain kinase 1 (LIMK1), transcript variant 1, mRNA. |
| Database Link: | NP_002305 Entrez Gene 16885 Mouse Entrez Gene 65172 Rat Entrez Gene 489800 Dog Entrez Gene 699494 Monkey Entrez Gene 3984 Human P53667 |



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Background:

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. LIMK1 is a serine/threonine kinase that regulates actin polymerization via phosphorylation and inactivation of the actin binding factor cofilin. This protein is ubiquitously expressed during development and plays a role in many cellular processes associated with cytoskeletal structure. This protein also stimulates axon growth and may play a role in brain development. LIMK1 hemizygoty is implicated in the impaired visuospatial constructive cognition of Williams syndrome. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Feb 2011]

Synonyms:

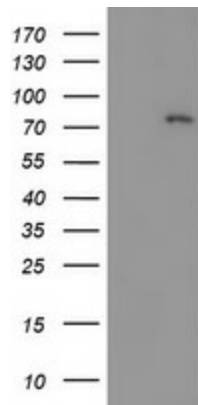
LIMK; LIMK-1

Protein Families:

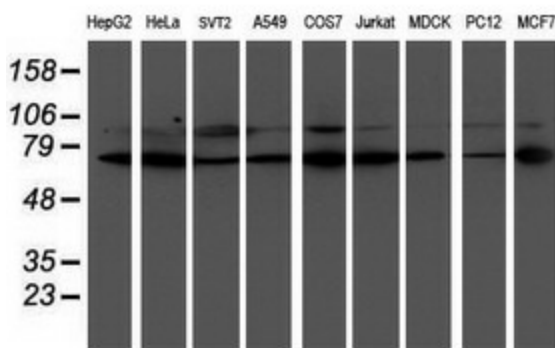
Druggable Genome, Protein Kinase

Protein Pathways:

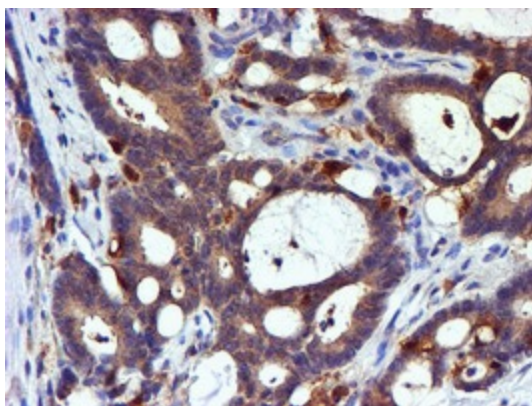
Axon guidance, Fc gamma R-mediated phagocytosis, Regulation of actin cytoskeleton

Product images:


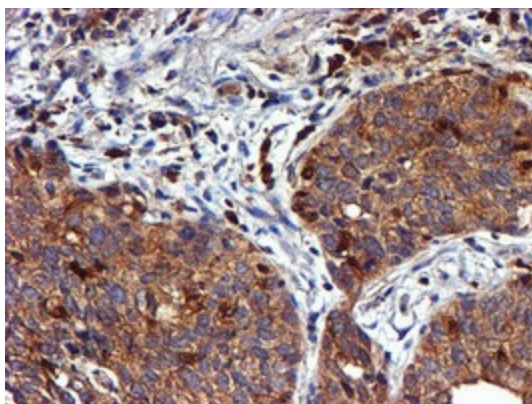
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY LIMK1 (Cat# [RC218058], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LIMK1 (Cat# [TA503012]). Positive lysates [LY400838] (100ug) and [LC400838] (20ug) can be purchased separately from OriGene.



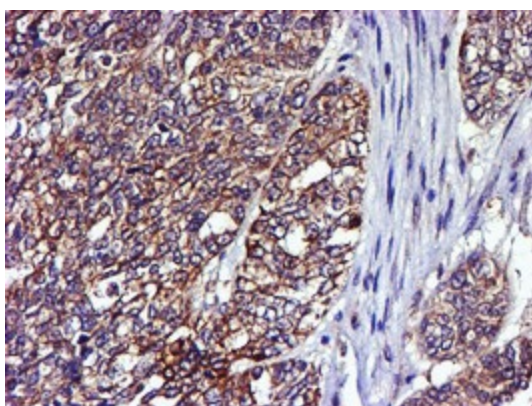
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-LIMK1 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



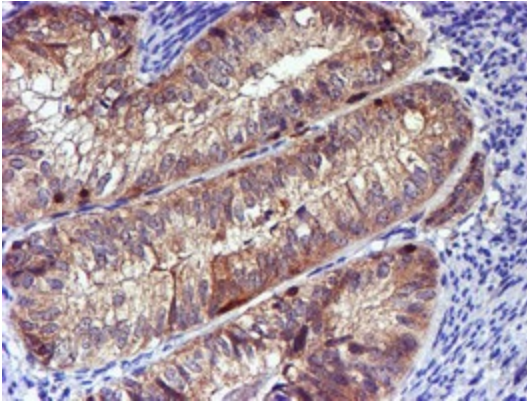
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-LIMK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503012])



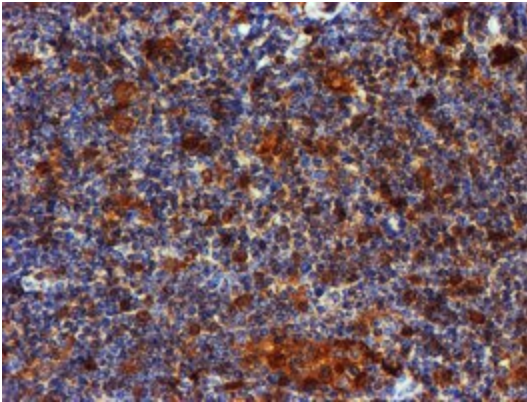
Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-LIMK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503012])



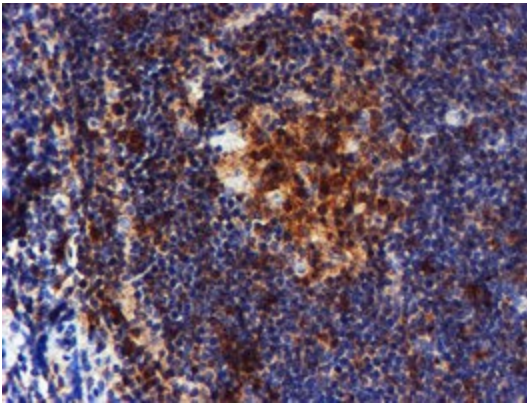
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-LIMK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503012])



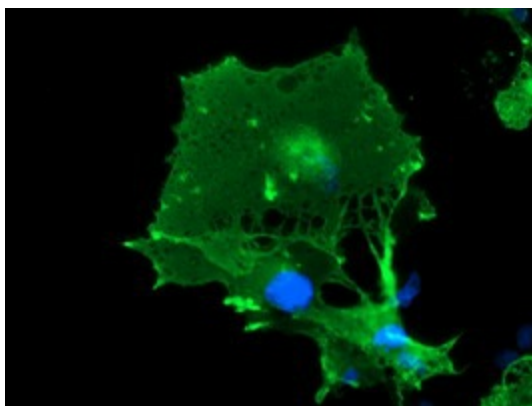
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-LIMK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503012])



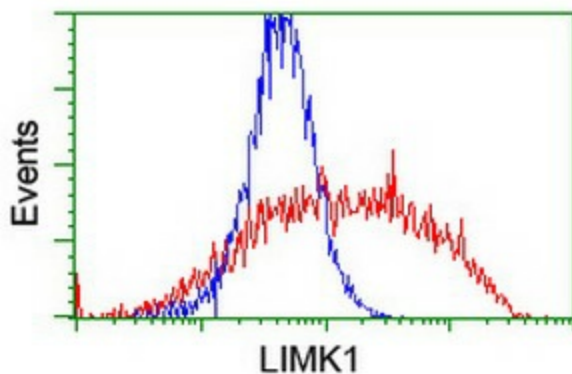
Immunohistochemical staining of paraffin-embedded Human lymphoma tissue using anti-LIMK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503012])



Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-LIMK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503012])



Anti-LIMK1 mouse monoclonal antibody ([TA503012]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY LIMK1 ([RC218058]).



HEK293T cells transfected with either [RC218058] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-LIMK1 antibody ([TA503012]), and then analyzed by flow cytometry.