

Product datasheet for **TA502978BM**

LIM Kinase 1 (LIMK1) Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI8C8]

Product data:

| | |
|-------------------------|---|
| Product Type: | Primary Antibodies |
| Clone Name: | OTI8C8 |
| Applications: | FC, IF, IHC, WB |
| Recommended Dilution: | WB 1:1000, IHC 1:150, IF 1:100, FLOW 1:100 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Mouse |
| Isotype: | IgG2a |
| Clonality: | Monoclonal |
| Immunogen: | Full length human recombinant protein of human LIMK1(NP_002305) produced in HEK293T cell. |
| Formulation: | PBS (pH 7.3) containing 1% BSA, 50% glycerol. |
| Concentration: | 0.5 mg/ml |
| Purification: | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G) |
| Conjugation: | HRP |
| Storage: | Store at -20°C as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Predicted Protein Size: | 72.4 kDa |
| Gene Name: | LIM domain kinase 1 |
| Database Link: | NP_002305 Entrez Gene 16885 Mouse Entrez Gene 65172 Rat 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.

Synonyms:

LIMK; LIMK-1

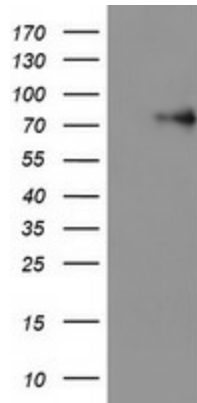
Protein Families:

Druggable Genome, Protein Kinase

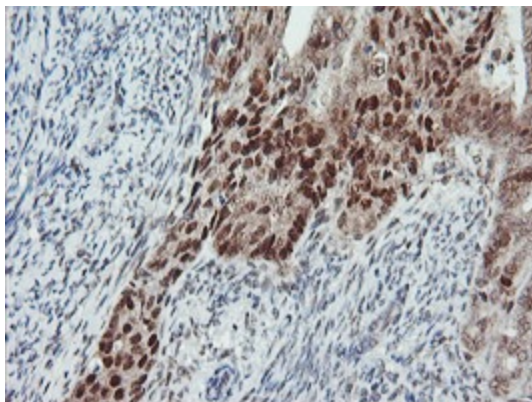
Protein Pathways:

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

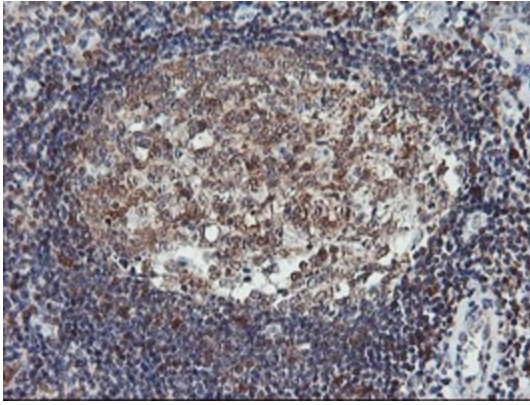
Product images:



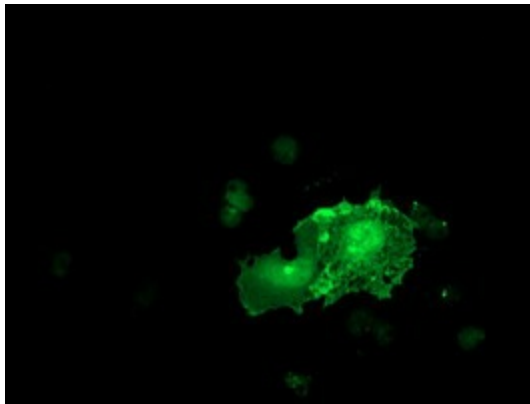
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY LIMK1 ([RC218058], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LIMK1. Positive lysates [LY400838] (100ug) and [LC400838]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



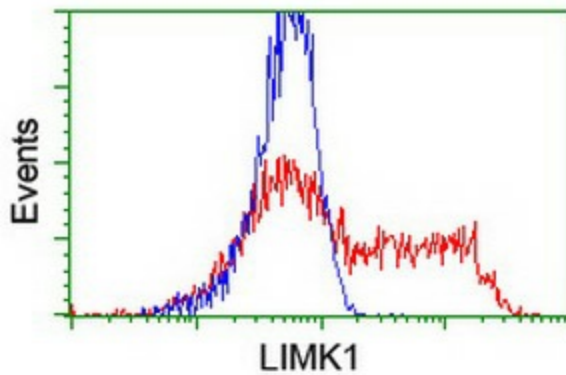
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-LIMK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502978])



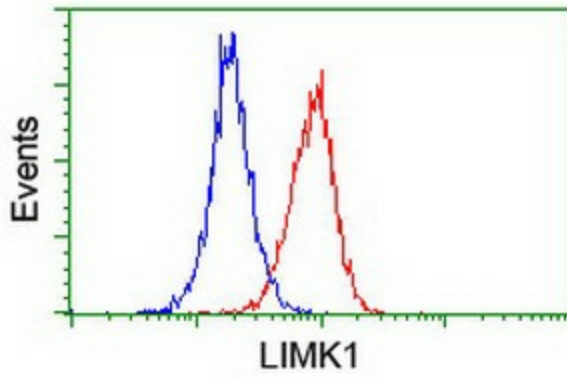
Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-LIMK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502978])



Anti-LIMK1 mouse monoclonal antibody ([TA502978]) 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 ([TA502978]), and then analyzed by flow cytometry.



Flow cytometric Analysis of Jurkat cells, using anti-LIMK1 antibody ([TA502978]) (Red), compared to a nonspecific negative control antibody (Blue).