

OriGene Technologies Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850 UNITED STATES

Phone: +1-858-888-7900 Fax: +1-858-888-7904 US-info@acris-antibodies.com OriGene EU

SM3137PX

Acris Antibodies GmbH

Schillerstr. 5 32052 Herford GERMANY

Phone: +49-5221-34606-0 Fax: +49-5221-34606-11 info@acris-antibodies.com

Monoclonal Antibody to Lck-interacting molecule / LIME

- Purified

Catalog No.: SM3137PX

Quantity: 1 mg

Concentration: 1.0 mg/ml

Background: LIME (Lck-interacting molecule) is a 31 kDa double-palmitoylated protein with unusually

basic cytoplasmic domain, expressed by T cells. After ligation of CD4 or CD8 T cell

coreceptors, LIME is phosphorylated by Src-family kinases and associates with Lck and Fyn kinases and with their negative regulator Csk. Interestingly, Csk-mediated phosphorylation of C-terminal negative-regulatory tyrosine of LIME-associated Lck can result in increase of enzymatic activity compared with the total pool of Lck, thus, LIME serves as a positive regulator of TCR-dependent T cell signaling. However, under some circumstances, LIME

may mediate inhibitory signals.

Host / Isotype: Mouse / IgG1

Recommended Isotype Controls:

SM10P (for use in human samples), AM03095PU-N

Clone: LIME-06

Immunogen: Bacterially expressed intracellular fragment corresponding to aa 141-295 of human LIME.

Format: State: Liquid Ig fraction

Purification: Protein A affinity chromatography (> 95% pure by SDS-PAGE) **Buffer System:** PBS, pH 7.4 containing 15 mM sodium azide as preservative.

Applications: Suitable for Immunoprecipitation.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: The antibody LIME-06 was raised against intracellular fragment corresponding to aa

141-295 of human LIME, a 31 kDa Lck-interacting transmembrane adaptor expressed by T

cells.

Species: Human.

Other species not tested.

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

Protocols: 1. Horejsi V, Zhang W, Schraven B.: Transmembrane adaptor proteins: organizers of

immunoreceptor signalling. Nat Rev Immunol. 2004 Aug;4(8):603-16.

2. Simeoni L, Smida M, Posevitz V, Schraven B, Lindquist JA.: Right time, right place: the organization of membrane proximal signaling. Semin Immunol. 2005 Feb;17(1):35-49.

3. Tedoldi S, Paterson JC, Hansmann ML, Natkunam Y, Rüdiger T, Angelisova P, Du MQ,

For research and in vitro use only. Not for diagnostic or therapeutic work.

 $Material\ Safety\ Data sheets\ are\ available\ at\ www.acris-antibodies.com\ or\ on\ request.$

Acris Antibodies is now part of the OriGene family. Learn more at www.origene.com

MP/20130115



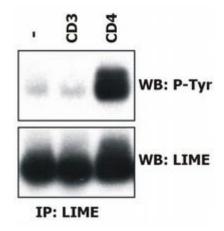
SM3137PX: Monoclonal Antibody to Lck-interacting molecule / LIME - Purified

Roberton H, Roncador G, Sanchez L, Pozzobon M, Masir N, Barry R, Pileri S, Mason DY, Marafioti T, Horejsi V.: Transmembrane adaptor molecules: a new category of lymphoid-cell markers. Blood. 2006 Jan 1;107(1):213-21.

4. Brdickova N, Brdicka T, Angelisova P, Horvath O, Spicka J, Hilgert I, Paces J, Simeoni L, Kliche S, Merten C, Schraven B, Horejsi V. LIME: a new membrane Raft-associated adaptor protein involved in CD4 and CD8 coreceptor signaling. J Exp Med. 2003 Nov 17;198(10):1453-62.

Pictures:

Induction of LIME tyrosine phosphorylation. Peripheral blood T cells were left unstimulated (-) or stimulated with anti-human CD3 (MEM-92; SM3152P) or anti-human CD4 (MEM-16; AM03098PU-N), and LIME was immunoprecipitated from laurylmaltoside lysates with the LIME-06 antibody (immunoaffinity sorbent) and analyzed by Western blotting to visualize tyrosine-phosphorylated LIME (top) and total LIME (bottom).



MP/20130115