

## Monoclonal Antibody to Lck-interacting molecule / LIME - Purified

<b>Catalog No.:</b>	SM3137PX
<b>Quantity:</b>	1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	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.
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), AM03095PU-N
<b>Clone:</b>	LIME-06
<b>Immunogen:</b>	Bacterially expressed intracellular fragment corresponding to aa 141-295 of human LIME.
<b>Format:</b>	<b>State:</b> Liquid Ig fraction <b>Purification:</b> Protein A affinity chromatography (> 95% pure by SDS-PAGE) <b>Buffer System:</b> PBS, pH 7.4 containing 15 mM sodium azide as preservative.
<b>Applications:</b>	Suitable for Immunoprecipitation. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	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. <b>Species:</b> Human. Other species not tested.
<b>Storage:</b>	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.
<b>Protocols:</b>	1. Horejsi V, Zhang W, Schraven B.: Transmembrane adaptor proteins: organizers of immunoreceptor signalling. <i>Nat Rev Immunol.</i> 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. <i>Semin Immunol.</i> 2005 Feb;17(1):35-49. 3. Tedoldi S, Paterson JC, Hansmann ML, Natkunam Y, Rüdiger T, Angelisova P, Du MQ,

Robertson 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).

