

Product datasheet for **SM3137P**

LIME (LIME1) Mouse Monoclonal Antibody [Clone ID: LIME-06]

Product data:

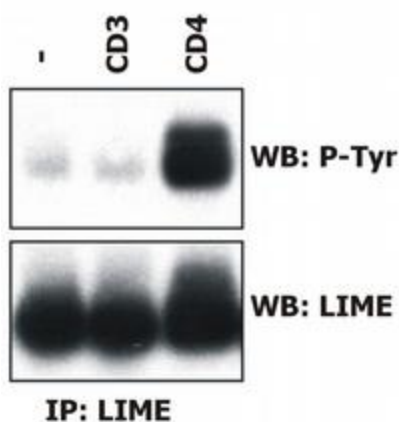
Product Type:	Primary Antibodies
Clone Name:	LIME-06
Applications:	FC, IP
Recommended Dilution:	Flow cytometry: 8-12 µg/ml. Intracellular staining. Immunoprecipitation.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a, kappa
Clonality:	Monoclonal
Immunogen:	Bacterially expressed intracellular fragment corresponding to aa 141-295 of human LIME.
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.
Formulation:	PBS, pH 7.4 containing 15 mM sodium azide as preservative. State: Purified State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Protein A affinity chromatography (> 95% pure by SDS-PAGE)
Conjugation:	Unconjugated
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.
Stability:	Shelf life: one year from despatch.
Gene Name:	Lck interacting transmembrane adaptor 1
Database Link:	Entrez Gene 54923 Human Q9H400



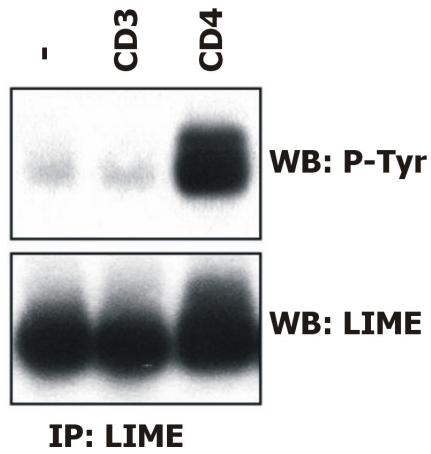
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- Background:** LIME (Lck-interacting molecule) is a 31 kDa double-palmitoylated protein with unusually basic cytoplasmic domain, expressed by T cells. After ligation of CD4 or CD8 T cell coreceptors, LIME is phosphorylated by Src-family kinases and 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.
- Synonyms:** LIME1, LIME, LIME-1, Lck-interacting membrane protein, Lck-interacting molecule, Lck-interacting transmembrane adapter 1
- Note:** Protocol: 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, 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.

Product images:



Induction of LIME tyrosine phosphorylation. Peripheral blood T cells were left unstimulated (-) or stimulated with anti-human CD3 (MEM-92) or anti-human CD4 (MEM-16), 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).



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