

## Monoclonal Antibody to LIME1 - PE

Alternate names: LIME, LIME-1, LIME1, Lck-interacting membrane protein, Lck-interacting molecule,

Lck-interacting transmembrane adapter 1

Catalog No.: SM3137R

Quantity: 0.1 mg

Concentration: 0.1 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.

Uniprot ID: Q9H400

NCBI: NP 060276.2

GenelD: <u>54923</u>

Host / Isotype: Mouse / IgG1 Clone: LIME-06

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

Format: State: Liquid purified IgG fraction

Purification: Size-exclusion chromatography.

**Buffer System:** PBS containing 15 mM sodium azide as preservative and 0.2% (w/v)

high-grade BSA (Protease free) as stabilizer.

Label: PE - Conjugated with R-Phycoerythrin under optimum conditions

Applications: Suitable for Flow Cytometry analysis (5  $\mu$ g/ml).

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.



## SM3137R: Monoclonal Antibody to LIME1 - PE

**Storage:** 

Store the antibody in the dark at 2-8°C.

Do Not Freeze!

Avoid prolonged exposure to light. Shelf life: one year from despatch.

- General References: 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, 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.