SANTA CRUZ BIOTECHNOLOGY, INC.

LIME (M-14): sc-48580

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Lck-interacting molecule (LIME) is a 295 amino acid transmembrane adaptor protein. LIME has a short extracellular domain and a cytoplasmic tail containing five tyrosine-based motifs. It is primarily expressed in hematopoietic and lung cells. LIME becomes tyrosine-phosphorylated after the CD4 or CD8 co-receptors cross-link. The phosphorylated LIME interacts with Lck, the Src family kinase and Csk, its negative regulator. LIME is expressed during the early and late stages of T cell activation and appears to be involved in regulation of T cell activation by co-receptors. It may be involved in activation of the ERK and JNK pathways in T cells; both ERK and JNK are part of the mitogen-activated protein kinase family. Bcr-mediated B cell activation may also involve LIME.

CHROMOSOMAL LOCATION

Genetic locus: LIME1 (human) mapping to 20q13.33; Lime1 (mouse) mapping to 2 H4.

SOURCE

LIME (M-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LIME of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48580 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

LIME (M-14) is recommended for detection of LIME of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LIME (M-14) is also recommended for detection of LIME in additional species, including bovine.

Suitable for use as control antibody for LIME siRNA (h): sc-60934, LIME siRNA (m): sc-60935, LIME shRNA Plasmid (h): sc-60934-SH, LIME shRNA Plasmid (m): sc-60935-SH, LIME shRNA (h) Lentiviral Particles: sc-60934-V and LIME shRNA (m) Lentiviral Particles: sc-60935-V.

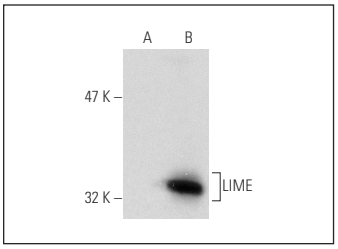
Molecular Weight of LIME: 34 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, HuT 78 whole cell lysate: sc-2208 or LIME (h): 293 Lysate: sc-112792.

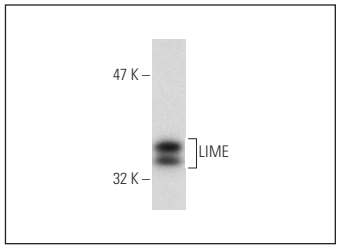
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



LIME (M-14): sc-48580. Western blot analysis of LIME expression in non-transfected: sc-110760 (**A**) and human LIME transfected: sc-112792 (**B**) 293 whole cell lysates.



LIME (M-14): sc-48580. Western blot analysis of LIME expression in CCRF-CEM whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **LIME (A-7): sc-365195** or **LIME (D-6): sc-166817**, our highly recommended monoclonal alternatives to LIME (M-14).