

# Integrin $\alpha$ L (E-1): sc-374172

## BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane  $\alpha$  and  $\beta$  subunits. The 16  $\alpha$  and 8  $\beta$  subunits heterodimerize to produce more than 20 different receptors. Most integrin receptors bind ligands that are components of the extracellular matrix, including Fibronectin, Collagen and Vitronectin. Certain integrins can also bind to soluble ligands such as Fibrinogen, or to counterreceptors on adjacent cells such as the intracellular adhesion molecules (ICAMs), leading to aggregation of cells. Ligands serve to cross-link or cluster integrins by binding to adjacent integrin receptors; both receptor clustering and ligand occupancy are necessary for the activation of integrin-mediated responses. In addition to mediating cell adhesion and cytoskeletal organization, integrins function as signaling receptors. Signals transduced by integrins play a role in many biological processes, including cell growth, differentiation, migration and apoptosis.

## CHROMOSOMAL LOCATION

Genetic locus: ITGAL (human) mapping to 16p11.2.

## SOURCE

Integrin  $\alpha$ L (E-1) is a mouse monoclonal antibody raised against amino acids 801-1100 mapping near the C-terminus of Integrin  $\alpha$ L of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Integrin  $\alpha$ L (E-1) is available conjugated to agarose (sc-374172 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374172 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374172 PE), fluorescein (sc-374172 FITC), Alexa Fluor® 488 (sc-374172 AF488), Alexa Fluor® 546 (sc-374172 AF546), Alexa Fluor® 594 (sc-374172 AF594) or Alexa Fluor® 647 (sc-374172 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374172 AF680) or Alexa Fluor® 790 (sc-374172 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

Integrin  $\alpha$ L (E-1) is recommended for detection of Integrin  $\alpha$ L of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Integrin  $\alpha$ L siRNA (h): sc-35691, Integrin  $\alpha$ L shRNA Plasmid (h): sc-35691-SH and Integrin  $\alpha$ L shRNA (h) Lentiviral Particles: sc-35691-V.

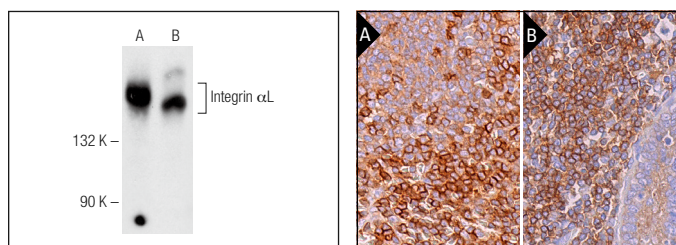
Molecular Weight of Integrin  $\alpha$ L: 180 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225 or THP-1 cell lysate: sc-2238.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



Integrin  $\alpha$ L (E-1): sc-374172. Western blot analysis of Integrin  $\alpha$ L expression in THP-1 (A) and CCRF-CEM (B) whole cell lysates.

Integrin  $\alpha$ L (E-1): sc-374172. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in white pulp and membrane and cytoplasmic staining of cells in red pulp (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing cytoplasmic and membrane staining of lymphoid cells (B).

## SELECT PRODUCT CITATIONS

- Jiang, F., et al. 2018. Discovery of a potent Grp94 selective inhibitor with anti-inflammatory efficacy in a mouse model of ulcerative colitis. *J. Med. Chem.* 61: 9513-9533.
- Pinto, D.O., et al. 2021. Extracellular vesicles from HTLV-1 infected cells modulate target cells and viral spread. *Retrovirology* 18: 6.
- Nguyen, T.T.T., et al. 2022. Tryptophan-dependent and -independent secretions of tryptophanyl-tRNA synthetase mediate innate inflammatory responses. *Cell Rep.* 42: 111905.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.