Background

Integrins are heterodimers composed of noncovalently associated transmembrane α and β subunits. The 16 α and 8 β 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.

References


Chromosomal Location

Genetic locus: ITGB2 (human) mapping to 21q22.3; Itgb2 (mouse) mapping to 10 C1.

Source

Integrin β2 (CTB104) is a mouse monoclonal antibody raised against amino acids 1-769 representing full length Integrin β2 of human origin.

Product

Each vial contains 200 μg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Integrin β2 (CTB104) is available conjugated to agarose (sc-8420 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8420 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-8420 PE), fluorescein (sc-8420 FITC), Alexa Fluor® 488 (sc-8420 AF488), Alexa Fluor® 546 (sc-8420 AF546), Alexa Fluor® 594 (sc-8420 AF594) or Alexa Fluor® 647 (sc-8420 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-8420 AF680) or Alexa Fluor® 790 (sc-8420 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, Integrin β2 (CTB104) is available conjugated to Alexa Fluor® 405 (sc-8420 AF405), 100 μg/2 ml, for IF, IHC(P) and FCM.

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Storage

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

Applications

Integrin β2 (CTB104) is recommended for detection of Integrin β2 of mouse, rat 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 1:150-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 μg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of Integrin β2: 95 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, CTLL-2 cell lysate: sc-2242 or TK-1 whole cell lysate: sc-364798.

Data

Integrin β2 (CTB104): sc-8420. Western blot analysis of Integrin β2 expression in HL-60 whole cell lysate.

Integrin β2 (CTB104): sc-8420. Immunofluorescence staining of methanol-fixed HL-60 cells showing membrane staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lung tissue showing membrane and cytoplasmic staining of macrophages (B).

Select Product Citations


Research Use

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