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.

Chromosomal Location

Genetic locus: ITGB3 (human) mapping to 17q21.32; Itgb3 (mouse) mapping to 11 E1.

Source

Integrin β3 (BV4) is a mouse monoclonal antibody raised against full-length Integrin β3 from endothelial cells of human origin.

Product

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Integrin β3 (BV4) is available conjugated to fluorescein (sc-52685 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

Applications

Integrin β3 (BV4) is recommended for detection of Integrin β3 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 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).


Molecular Weight of Integrin β3: 125 kDa.

Positive Controls: MDA-MB-231 cell lysate: sc-2232 or Human Platelet Extract: sc-363773.

Storage

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