

Basic Information

Product Name	Anti-Talin-1/TLN1 Antibody (Clone#2G10D2)
Gene Name	TLN1
Source	Mouse
Clonality	Monoclonal
Isotype	IgG1
Species Reactivity	human, mouse, rat
Tested Application	WB, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E. coli-derived human Talin 1/TLN1 recombinant protein (Position: Q1658-N1876). Human TLN1 shares 99.1% and 99.5% amino acid (aa) sequence identity with mouse and rat TLN1, respectively.
Concentration	500 ug/ml
Purification	protein G/A purified
Observed MW	270 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed):1:50-200

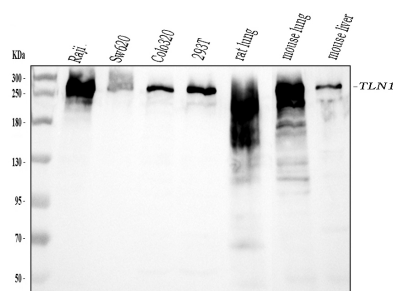
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Talin-1 is a protein that in humans is encoded by the TLN1 gene. This gene encodes a cytoskeletal protein that is concentrated in areas of cell-substratum and cell-cell contacts. The encoded protein plays a significant role in the assembly of actin filaments and in spreading and migration of various cell types, including fibroblasts and osteoclasts. It codistributes with integrins in the cell surface membrane in order to assist in the attachment of adherent cells to extracellular matrices and of lymphocytes to other cells. The N-terminus of this protein contains elements for localization to cell-extracellular matrix junctions. The C-terminus contains binding sites for proteins such as beta-1-integrin, actin, and vinculin.

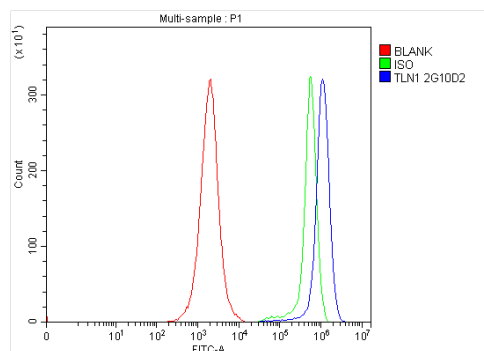
Selected Validation Data



Western blot analysis of Talin-1/TLN1 using anti-Talin-1/TLN1 antibody (M02859). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Raji whole cell lysates,
Lane 2: Sw620 whole cell lysates,
Lane 3: Colo320 whole cell lysates,
Lane 4: 293T whole cell lysates,
Lane 5: rat lung tissue lysates,
Lane 6: mouse lung tissue lysates,
Lane 7: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Talin-1/TLN1 antigen affinity purified monoclonal antibody (M02859) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Talin-1/TLN1 at approximately 270 kDa. The expected band size for Talin-1/TLN1 is at 270 kDa.



Flow Cytometry analysis of Jurkat cells using anti-Talin-1/TLN1 antibody (M02859).

Overlay histogram showing Jurkat cells stained with M02859 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Talin-1/TLN1 Antibody (M02859) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.