

## Basic Information

|                           |  |            |
|---------------------------|--|------------|
| <b>Product Name</b>       | Anti-Talin-1/TLN1 Antibody   |            |
| <b>Gene Name</b>          | TLN1   |            |
| <b>Source</b>             | Rabbit   |            |
| <b>Clonality</b>          | Polyclonal   |            |
| <b>Isotype</b>            | IgG  |            |
| <b>Species Reactivity</b> | human, mouse, rat  |            |
| <b>Tested Application</b> | WB, IHC, ICC/IF, FCM, ELISA  |            |
| <b>Contents</b>           | 500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.   |            |
| <b>Immunogen</b>          | E.coli-derived human Talin 1/TLN1 recombinant protein (Position: Q1658-N1876).   |            |
| <b>Concentration</b>      | 500 ug/ml  |            |
| <b>Purification</b>       | Immunogen affinity purified.   |            |
| <b>Observed MW</b>        | 270 kDa  |            |
| <b>Dilution Ratios</b>    | Western blot (WB):   | 1:500-2000 |
|                           | Immunohistochemistry (IHC):  | 1:50-400   |
|                           | Immunocytochemistry/Immunofluorescence (ICC/IF):   | 1:50-400   |
|                           | Flow Cytometry (Fixed):  | 1:50-200   |
|                           | Enzyme linked immunosorbent assay (ELISA):   | 1:100-1000 |
|                           | (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user. |            |

## Storage

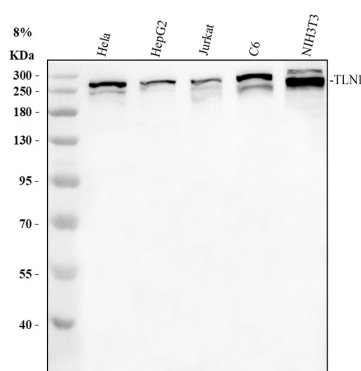
12 months from date of receipt, -20°C as supplied.

## 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 (A02859-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

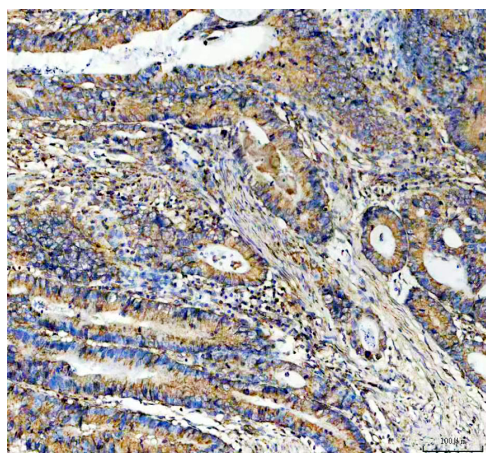
Lane 3: human Jurkat whole cell lysates,

Lane 4: rat C6 whole cell lysates,

Lane 5: mouse NIH/3T3 whole cell lysates.

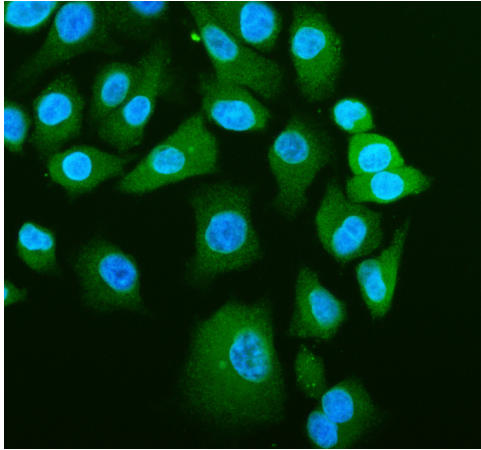
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Talin-1/TLN1 antigen affinity purified polyclonal antibody (A02859-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). 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.



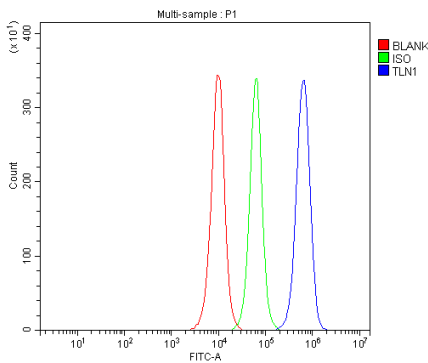
IHC analysis of Talin-1/TLN1 using anti-Talin-1/TLN1 antibody (A02859-2).

Talin-1/TLN1 was detected in a paraffin-embedded section of human colon cancer tissue. The tissue section was incubated with rabbit anti-Talin-1/TLN1 Antibody (A02859-2) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of Talin-1/TLN1 using anti-Talin-1/TLN1 antibody (A02859-2).

Talin-1/TLN1 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-Talin-1/TLN1 Antibody (A02859-2) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of Jurkat cells using anti-Talin-1/TLN1 antibody (A02859-2).

Overlay histogram showing Jurkat cells stained with A02859-2 (Blue line). To facilitate intrMyelin basic protein/MBP/lular 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 rabbit anti-Talin-1/TLN1 Antibody (A02859-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit 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.