

Product Information

Monoclonal Anti-Talin, Clone TA205

produced in mouse, purified immunoglobulin

Catalog Number **SAB4200041**

Product Description

Monoclonal Anti-Talin (mouse IgG1 isotype) is derived from the hybridoma TA205 produced by the fusion of mouse myeloma cells and splenocytes from mice immunized with partially purified preparation of human platelet talin.^{1,2} The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-Talin recognizes human, bovine, and chicken talin. The antibody epitope resides within amino acids 139-433. The product may be used in several immunochemical techniques including immunoblotting (~225 kDa), immunoprecipitation and immunocytochemistry.¹

Talin is a cytoskeletal protein that is found 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. In human, two types of talin were found, talin 1 and talin 2. Talin 1 co-distributes with integrins in the cell surface membrane in order to assist in the attachment of adherent cells to the extracellular matrix, and of lymphocytes to other cells. The N-terminus of the protein contains elements for localization to cell-extracellular matrix junctions. The C-terminus contains binding sites for proteins such as β -1-integrin, actin, and vinculin. Talin 2 has a different pattern of expression compared to talin 1, but like talin1 is thought to associate with unique transmembrane receptors to form novel linkages between extracellular matrices and actin cytoskeleton.^{3,4}

Reagent

Solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at -20 °C. For continuous use, the product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 0.5-1.0 µg/mL is recommended using HeLa cell extracts.

Immunofluorescence: a working antibody concentration of 0.5-1 µg/mL is recommended using HeLa cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Bolton, S.J., et al., *Cell Motil. Cytoskeleton*, **36**, 363-376 (1997).
2. Porter, R.M., et al., *J. Pathol.*, **170**, 435-440 (1993).
3. Monkley, S.J. et al., *Biochem. Biophys. Res. Commun.*, **286**, 880-885 (2001).
4. Senetar, M.A., and McCann, R.O., *Gene*, **362**, 141-152 (2005).

GG,TD,KAA,PHC 02/10-1

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