



## $\alpha$ T- catenin (892\_24D2S)

**CATALOG NUMBER:** MUB0311S

**CLONE:** 892\_24D2S

**SPECIES / ISOTYPE:** mouse IgG2a

**PRODUCT FORM:** culture supernatant of monoclonal antibody

### BACKGROUND

Catenins are proteins that connect cadherin/ $\beta$ -catenin cell adhesion complexes to the actin cytoskeleton. Although originally discovered in testis,  $\alpha$ T-catenin is expressed in other tissues, the highest levels being observed in heart. Immunohistochemical analysis showed human  $\alpha$ T-catenin localization at intercalated discs of cardiomyocytes and in peritubular myoid cells of testis. It is proven that  $\alpha$ T-catenin can functionally restore cell-cell adhesion in colon cancer cells lacking  $\alpha$ -catenins. This indicates that this protein is involved in the formation of specific cell-cell contacts in specific types of muscle cells.

The encoded protein has about the same predicted size (100 kDa) as other  $\alpha$ -catenins to which it shows an overall amino acid identity of 57%. In cells transfected with  $\alpha$ T-catenin cDNA, interaction with  $\beta$ -catenin was demonstrated by co-immunoprecipitation.

The 892\_24D2S antibody against  $\alpha$ T-catenin does not show any cross reaction with  $\alpha$ E-catenin or  $\alpha$ N-catenin in western blot analysis.

### SOURCE

892\_24D2S is a mouse monoclonal IgG2a antibody derived by fusion of SP2/0-Ag14 mouse myeloma cells with spleen cells from a C57Bl/6 mouse immunized with a synthetic peptide corresponding to amino acids 164-177 of the human  $\alpha$ T-catenin protein including an additional N-terminal cysteine (CVANKSDLQKTYQKL) coupled to keyhole limpet hemocyanin.

### PRODUCT

The vial contains 1 ml of culture supernatant of monoclonal antibody containing 0.09% sodium azide.

### SPECIFICITY

892\_24D2S reacts with an epitope located between residues 164-177 of the human  $\alpha$ T-catenin protein.

892\_24D2S is suitable for immunofluorescence (acetone-fixed cells), immunocytochemistry (methanol and paraformaldehyde-fixed cells), followed by permeabilisation in 0.2% Triton-X 100

for 2 min), immunoprecipitation, immunoblotting and for immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent. Optimal antibody dilution should be determined by titration.

### SPECIES REACTIVITY

Human.

### STORAGE

Store at 4°C, or in small aliquots at -20°C.

### REFERENCES

1. Janssens, B., Goossens, S., Staes, K., Gilbert, B., van Hengel, J., Colpaert, C., Bruyneel, E., Mareel, M., and van Roy, F. (2001).  $\alpha$ T-catenin: a novel tissue-specific  $\beta$ -catenin-binding protein mediating strong cell-cell adhesion, *J. Cell. Sci.* *114*, 3177-88.

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### WARNING and CAUTION

This product is intended FOR RESEARCH USE ONLY, and FOR TESTS IN VITRO, not for use in diagnostic or therapeutic procedures involving humans or animals.

This product contains sodium azide. To prevent formation of toxic vapors, do not mix with strong acidic solutions. To prevent formation of potentially explosive metallic azides in metal plumbing, always wash into drain with copious quantities of water.

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