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ProductInformation

Anti-α-Actinin
Delipidized, Whole Antiserum

Product No. **A 2543**

Product Description

Anti-α-Actinin is a pooled antiserum produced in rabbits by repeated injections of purified α-actinin from chicken gizzard.[1] The immunization process is carefully monitored throughout the immunization schedule to assure constant quality.

Anti-α-Actinin specifically stains α-actinin in cell cultures using indirect immunfluorescent labeling techniques. The antibody reacts best with cultured chicken fibroblasts, however adequate labeling may also be obtained with cells of other species. In an immunoblot assay, the antiserum specifically stains the α-actinin band.

α-Actinin is an actin-binding protein present in both muscle and non-muscle cells. It has a polypeptide molecular weight of 100,000 daltons and forms dimers in solution. In normal skeletal muscle, α-actinin is associated with the z-discs, which define the muscle sarcomeres. In smooth muscle, α-actinin is detected predominantly in dense bodies and plaques, which are characteristic of that tissue. Immunofluorescent labeling of a large variety of cells with anti-α-actinin reveals an extensive association of the proteins with the actin containing stress fibers and in particular with their membrane bound termini.

Anti-α-Actinin may be used for immunofluorescent labeling of α-actinin in cultured cells and tissues. It may also be used to aid in the study of the organization of normal and pathological skeletal muscle. The antibody can be used to study membrane anchorage sites and also for identification of α-actinin by immunoblotting analysis.

Reagent

The antiserum has been treated to remove lipoproteins and is supplied as a liquid with 0.1% sodium azide as a preservative.

Precautions

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

By indirect immunofluorescence, a working antibody dilution of at least 1:500 is recommended using cultured chicken fibroblasts.

In order to obtain the best results, it is recommended that each individual user determine their working dilution by titration.

References

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