

32-3176: Alpha Actinin Native Protein

Alternative Name : Alpha-actinin-1, Alpha-actinin cytoskeletal isoform, Non-muscle alpha-actinin-1, F-actin cross-linking protein, ACTN1.

Description

Source : Chicken Gizzard. Ultra pure Alpha Actinin having a Molecular mass of 95,000 Dalton. ACTN1 encodes a nonmuscle, cytoskeletal, alpha actinin isoform and maps to the same site as the structurally similar erythroid beta spectrin gene. Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins. Alpha actinin is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z-disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments.

Product Info

Amount : 50 µg
Purification : Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Content : The protein was lyophilized from a 1mg/ml solution containing 10mM Tris acetate buffer pH 7.6, 0.1mM EDTA, 2mM DTT, and 20mM NaCl.
Storage condition : Lyophilized a-Actinin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution a-Actinin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Application Note

It is recommended to reconstitute the lyophilized a-Actinin in sterile 18MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

