Product Datasheet

Product Name	Actinin Alpha
Cata No	CB501133
Source	*Chicken Gizzard*
Synonyms	Alpha-actinin-1, Alpha-actinin cytoskeletal isoform, Non-muscle alpha-actinin-1, F-actin cross-linking protein, ACTN1.

Description

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. Ultra pure Alpha Actinin having a Molecular mass of 95,000 dalton.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Purity

Greater than 95.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation

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.

Reconstitution

It is recommended to reconstitute the lyophilized a-Actinin in sterile 18MΩ-cm H_2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized a-Actinin although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution a-Actinin should be stored at 4℃ between 2-7 days and for future use below -18℃. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Please prevent freeze-thaw cycles.

Applications

Protein standard in 1D and 2D SDS gelelectrophoresis
Immunoassays
Immunization

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