9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

a-Actinin

Actinin Alpha
NTP0002

Product Overview

Name	a-Actinin
Description	
Actinin Alpha	
Accession (Primary)	P05094
Synonyms	
Alpha-actinin-1, Alpha-actinin cytoskeletal isoform, Non-muscle alpha-actinin-1, F-actin cross-linking protein, ACTN1.	
Introduction	
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.	
Source	
Chicken Gizzard.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
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.	
Stability	
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.	
Purity	
Greater than 95.0% as determined by analysis by SDS-PAGE.	
Solubility	

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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.

Applications

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

Precautions

a-Actinin is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P05094)