

# A2M Human

Macroglobulin Alpha-2 Human  
NTP0001

## Product Overview

Name A2M Human

### Description

Macroglobulin Alpha-2 Human

Accession (Primary) [P01023](#)

### 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

It is recommended to reconstitute the lyophilized  $\alpha$ -Actinin in sterile 18M $\phi$ -cm H<sub>2</sub>O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

#### Applications

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

#### Precautions

A2M Human is for research use only and not for use in diagnostic or therapeutic procedures.

**Target Information:** ( [P01023](#) )