## 32-13026: ACTN1 Human

Alternative Name : ACTN1, Actinin, Alpha 1, Alpha-Actinin Cytoskeletal Isoform, F-Actin Cross-Linking Protein, Non-Muscle Alpha-Actinin-1, BDPLT15, Actinin 1 Smooth Muscle, Alpha-Actinin-1.

## Description

Source: Escherichia Coli.
Sterile Filtered colorless solution.
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.
ACTN1 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 274 amino acids ( $1-249$ a.a) and having a molecular mass of 31.4 kDa . ACTN1 is fused to a 25 amino acid His-tag at N -terminus \& purified by proprietary chromatographic techniques.

## Product Info

## Amount :

## Purification :

## Content :

## Storage condition :

## $5 \mu \mathrm{~g} / 20 \mu \mathrm{~g}$

Greater than $95.0 \%$ as determined by SDS-PAGE.
ACTN1 protein solution ( $1 \mathrm{mg} / \mathrm{ml}$ ) containing Phosphate Buffered Saline ( pH 7.4 ) and $10 \%$ glycerol.
Store at $4^{\circ} \mathrm{C}$ if entire vial will be used within 2-4 weeks. Store, frozen at $-20^{\circ} \mathrm{C}$ for longer periods of time. For long term storage it is recommended to add a carrier protein ( $0.1 \%$ HSA or BSA).Avoid multiple freeze-thaw cycles.
Amino Acid :
MGSSHHHHHH SSGLVPRGSH MGSEFMDHYD SQQTNDYMQP EEDWDRDLLL DPAWEKQQRK TFTAWCNSHL RKAGTQIENI EEDFRDGLKL MLLLEVISGE RLAKPERGKM RVHKISNVNK ALDFIASKGV KLVSIGAEEI VDGNVKMTLG MIWTIILRFA IQDISVEETS AKEGLLLWCQ RKTAPYKNVN IQNFHISWKD GLGFCALIHR HRPELIDYGK LRKDDPLTNL NTAFDVAEKY LDIPKMLDAE DIVGTARPDE KAIMTYVSSF YHAF.

