

Recombinant Human ACTN2, His-tagged

Cat. No. ACTN2-31382TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment, corresponding to amino acids 261-886 of Human Sarcomeric Alpha Actinin, with N terminal His tag, 626 amino acids, 72kDa, ,
Species	Human
Source	E.coli
ProteinLength	261-886 a.a.
Description	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. This gene encodes a muscle-specific, alpha actinin isoform that is expressed in both skeletal and cardiac muscles.
Conjugation	HIS
Tissue specificity	Expressed in both skeletal and cardiac muscle.
Form	Lyophilised:Reconstitution with 136 µl aqua dest.

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Storage buffer	Preservative: None Constituents: 0.5% Trehalose, 6M Urea, 100mM Sodium phosphate, 10mM Sodium chloride, pH 4.5
Storage	Shipped at 4°C. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.
Sequences of amino acids	QAETAANRICKVLAVNQENERLMEEYERLASELLEWIRRT IPWLENRTPEKTMQAM QKKLEDFRDYRRKHKPPKVQEK CQLEINFNTLQTKLRISNRPAFMPSEGKMSVSDIA GAWQ RLEQAEKGYEEWLLNEIRRLERLEHLAEKFRQKASTHETW AYGKEQILLQK DYESASLTEVRALLRKHEAFESDLAAH QDRVEQIAAIAQELNELDYHDAVNVNDRC QKICDQWDR LGTLTQKRREALERMEKLLETIDQLHLEFAKRAAPFNN WMEGAMED LQDMFIVHSIEEIQSLITAHEQFKATLPEADG ERQSIMAIQNEVEKVIQSYNIRISSNP YSTVTMDELK TKWDKVKQLVPIRDQSLQEELARQHANERLRRQFAAQA NAIGPWI QNKMEEIARSSIQITGALEDQMNQLKQYEHNIINYKNNIDKLEGDHQLIQEALVFDNK HTNYTMEHIRVGW ELLTTIARTINEVETQILTRDAKGITQEQMNEFRASF NHFDRR KNGLMDHEDFRACLISMGYDLGAEAFARIMTL VDPNGQGTVTQSFIDFMTRETAD TDTAEQVIASFRILAS DKPYILAEELRRELPPDQAQYCIKRMPAYSGPGSVPGA LDY AAFSS
Sequence Similarities	Belongs to the alpha-actinin family. Contains 1 actin-binding domain. Contains 2 CH (calponin-homology) domains. Contains 2 EF-hand domains. Contains 4 spectrin repeats.

GENE INFORMATION

Gene Name	ACTN2 actinin, alpha 2 [Homo sapiens]
Official Symbol	ACTN2
Synonyms	ACTN2; actinin, alpha 2; alpha-actinin-2;
Gene ID	88

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mRNA Refseq	NM_001103
Protein Refseq	NP_001094
MIM	102573
Uniprot ID	P35609
Chromosome Location	1q42-q43
Pathway	Activation of NMDA receptor upon glutamate binding and postsynaptic events, organism-specific biosystem; Adherens junction, organism-specific biosystem; Adherens junction, conserved biosystem; Amoebiasis, organism-specific biosystem; Amoebiasis, conserved biosystem;
Function	FATZ 1 binding; ZASP binding; actin binding; calcium ion binding; identical protein binding;

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