

Product datasheet for **SC337642**

ACTN2 (NM_001278343) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACTN2 (NM_001278343) Human Untagged Clone
Tag:	Tag Free
Symbol:	ACTN2
Synonyms:	CMD1AA; CMH23; MPD6; MYOCOZ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_001278343, the custom clone sequence may differ by one or more nucleotides

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ATGAACCAGATAGAGCCCGCGTGCAGTACAACACTCGTGTACGACGAGGATGAGTACATGATCCAGGAGG
AGGAGTGGGACCGGACCTGCTCCTGGACCCAGCCTGGGAGAAGCAGCAGAGGAAGACCTTCACTGCCTT
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AGAACAAGATGGAGGAGATTGCCCGGAGCTCCATCCAGATCACAGGAGCCCTGGAAGACCAGATGAACCA
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GGGAGCTGCTGCTGACAACCATCGCCAGAACCATCAATGAGGTGGAGACTCAGATCCTGACGAGAGATGC
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AGAGGATGCCCGCTACTCGGGCCAGGCAGTGTGCCTGGTGCCTGGATTACGCTGCGTTCCTTCCGC
ACTCTACGGGAGAGCGATCTGTGA
    
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Restriction Sites: SgfI-MluI
ACCN: NM_001278343

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001278343.1 , NP_001265272.1
RefSeq Size:	4926 bp
RefSeq ORF:	2685 bp
Locus ID:	88
UniProt ID:	P35609
Cytogenetics:	1q43
Protein Pathways:	Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton, Systemic lupus erythematosus, Tight junction
Gene Summary:	<p>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. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2013]</p> <p>Transcript Variant: This variant (2) lacks an alternate internal coding exon and contains another compared to variant 1. The resulting isoform (2) has a few internal differences but is the same length as isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>