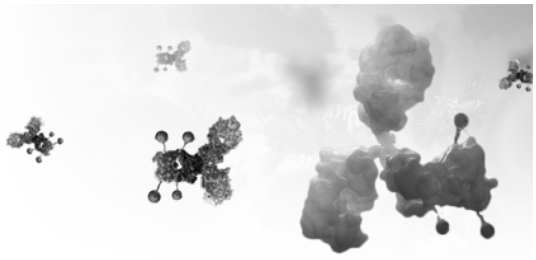

# Human ACTN2 peptide (DAG-P1959)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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|---|---|
| **Antigen 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. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2013] |
| **Specificity** | Expressed in both skeletal and cardiac muscle. |
| **Purity** | 70 - 90% by HPLC. |
| **Conjugate** | Unconjugated |
| **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. |
| **Format** | Liquid |
| **Preservative** | None |
| **Storage** | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request. |

## GENE INFORMATION

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|---|---|
| **Gene Name** | ACTN2 actinin, alpha 2 [ Homo sapiens (human) ] |
| **Official Symbol** | ACTN2 |

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|---|---|
| **Synonyms** | ACTN2; actinin, alpha 2; CMD1AA; alpha-actinin-2; F-actin cross-linking protein; alpha-actinin skeletal muscle; |
| **Entrez Gene ID** | 88 |
| **mRNA Refseq** | NM_001103.3 |
| **Protein Refseq** | NP_001094.1 |
| **UniProt ID** | B2RCS5 |
| **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; Arrhythmogenic right ventricular cardiomyopathy, organism-specific biosystem; Arrhythmogenic right ventricular cardiomyopathy (ARVC), organism-specific biosystem; Arrhythmogenic right ventricular cardiomyopathy (ARVC), conserved bios |
| **Function** | FATZ binding; LIM domain binding; actin filament binding; calcium ion binding; cytoskeletal protein binding; identical protein binding; integrin binding; ion channel binding; protein binding; protein dimerization activity; structural constituent of muscle |

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