

## Product datasheet for **RC204924L4V**

### alpha Actinin (ACTN1) (NM\_001102) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	alpha Actinin (ACTN1) (NM_001102) Human Tagged ORF Clone Lentiviral Particle
Symbol:	alpha Actinin
Synonyms:	BDPLT15
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001102
ORF Size:	2676 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC204924).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_001102.2</a>
RefSeq Size:	3743 bp
RefSeq ORF:	2679 bp
Locus ID:	87
UniProt ID:	<a href="#">P12814</a>
Cytogenetics:	14q22-q24
Domains:	CH, spectrin, EFh
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS



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**Protein Pathways:** Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton, Systemic lupus erythematosus, Tight junction

**MW:** 103.1 kDa

**Gene Summary:** 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 nonmuscle, cytoskeletal, alpha actinin isoform and maps to the same site as the structurally similar erythroid beta spectrin gene. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]