

## Product datasheet for RC222754L4V

## OriGene Technologies, Inc.

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## SERCA2 (ATP2A2) (NM\_001681) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: SERCA2 (ATP2A2) (NM\_001681) Human Tagged ORF Clone Lentiviral Particle

Symbol: SERCA2

**Synonyms:** ATP2B; DAR; DD; SERCA2

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_001681 **ORF Size:** 2991 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC222754).

Sequence:

Cytogenetics:

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. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeg:** NM 001681.3

 RefSeq Size:
 4359 bp

 RefSeq ORF:
 2994 bp

 Locus ID:
 488

 UniProt ID:
 P16615

**Domains:** E1-E2\_ATPase, Cation\_ATPase\_N, Hydrolase, Cation\_ATPase\_C

**Protein Families:** Druggable Genome, Transmembrane

12q24.11





## SERCA2 (ATP2A2) (NM\_001681) Human Tagged ORF Clone Lentiviral Particle - RC222754L4V

**Protein Pathways:** Alzheimer's disease, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Calcium

signaling pathway, Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic

cardiomyopathy (HCM)

MW: 109.7 kDa

**Gene Summary:** This gene encodes one of the SERCA Ca(2+)-ATPases, which are intracellular pumps located in

the sarcoplasmic or endoplasmic reticula of the skeletal muscle. This enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol into the sarcoplasmic reticulum lumen, and is involved in regulation of the contraction/relaxation cycle. Mutations in this gene cause Darier-White disease, also known as keratosis follicularis, an autosomal dominant skin disorder characterized by loss of adhesion between epidermal

cells and abnormal keratinization. Other types of mutations in this gene have been

associated with various forms of muscular dystrophies. Alternative splicing results in multiple

transcript variants encoding different isoforms. [provided by RefSeq, Dec 2019]