

Product datasheet for RC222754L4V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

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: ATP2A2

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:

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

 Cytogenetics:
 12q24.11

Domains: E1-E2_ATPase, Cation_ATPase_N, Hydrolase, Cation_ATPase_C

Protein Families: Druggable Genome, Transmembrane





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]