

Product datasheet for RC206577

alpha Sarcoglycan (SGCA) (NM_000023) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	alpha Sarcoglycan (SGCA) (NM_000023) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	alpha Sarcoglycan
Synonyms:	50DAG; adhalin; ADL; DAG2; DMDA2; LGMD2D; LGMDR3; SCARMD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206577 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGAGACACTCTTCTGGACTCCTCTCCTCGTGGTTCTCCTGGCAGGGCTGGGGACACCGAGGCC
AGCAGACCACGCTACACCCACTTGTGGGCGTGTCTTTGTGCACACCTTGGACCATGAGACGTTTCTGAG
CCTTCTGAGCATGTCGCTGTCCACCCGCTGTCCACATCACCTACCACGCCACCTCCAGGGACACCCA
GACCTGCCCGGTGGCTCCGCTACACCCAGCGCAGCCCCACCACCTGGCTTCTCTACGGCTCTGCCA
CCCCAGAAGATCGTGGGCTCCAGGTCATTGAGGTCACAGCCTACAATCGGGACAGCTTTGATACCACTCG
GCAGAGGCTGGTGTGGAGATTGGGGACCCAGAAGGCCCCCTGCTGCCATACCAAGCCGAGTTCTGGTG
CGCAGCCACGATGCGGAGGAGGTGCTGCCTCAACACCTGCCAGCCGCTTCTCTCAGCCTTGGGGGAC
TCTGGGAGCCCGAGAGCTTTCAGCTGCTCAACGTCACCTCTGCCTTGGACCGTGGGGGCCGTGCCCCCT
TCCATTGAGGGCCGAAAAGAAGGGGTATACATTAAGGTGGGTTCTGCCTCACCTTTTTCTACTTGCCTG
AAGATGGTGGCATCCCCGATAGCCACGCCCGCTGTGCCAGGGCCAGCCTCCACTTCTGTCTTGTACG
ACACCTTGGCACCCCACTTCCGCGTTGACTGGTGAATGTGACCTGGTGGATAAGTCAGTGCCGGAGCC
TGCAGATGAGGTGCCACCCAGGTGATGGGATCCTGGAGCATGACCCGTTCTTCTGCCACCCACTGAG
GCCCCAGACCCGACTTCTTGGTGGATGCTCTGGTCACCCCTCTGGTGCCCTGCTGGTGGCCCTGCTTC
TCACTTGTCTGGCCTATGTGATGTGCTGCCGGCGGGAGGGAAGGCTGAAGAGAGACCTGGCTACCTC
CGACATCCAGATGGTCCACCACTGCACCATCCACGGGAACACAGAGGAGCTGCGGAGATGGCGGCCAGC
CGCGAGGTGCCCGGCCACTCTCCACCCTGCCATGTTCAATGTGCACACAGGTGAGCGGCTGCCTCCCC
CGCTGGACAGCGCCAGGTGCCCTCATTCTGGACCAGCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC206577 protein sequence
Red=Cloning site Green=Tags(s)

MAETLFWTPLL VLLAGLDTEAQQTTLHPLVGRV FVHTLDHETFLSLPEHVAVPPAVHITYHAHLQGH
 DLPRWLR YTPSPHHPGFLYGSATPEDRGLQVIEVTAYNRDSFDTRQRLVLEIGDPEGPLLPYQAEFLV
 RSHDAEEVLPSTPASRFLSALGGLWEPGELQLLNVT SALDRGGRVPLPIEGRKEGVYIKVGSASPFSTCL
 KMVASPD SHARCAQGPPLL SCYDTLAPHFRVDWCNVTLVDKSVPEPADEVPTPGDGILEHDPFFCPPT
 APDRDFLVDALVTLLVPLLVALLLTLLLAYVMCCRREGRLKRDLATSDIQMVHHC TIHGNT EELRQMAAS
 REVPRPLSTLPMFNVHTGERLPPRVDSAQVPLILDQH

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6197_b02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000023

ORF Size: 1161 bp

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.

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:

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_000023.4](#)

RefSeq Size: 1441 bp

RefSeq ORF: 1164 bp

Locus ID: 6442

UniProt ID: [Q16586](#)

Cytogenetics: 17q21.33

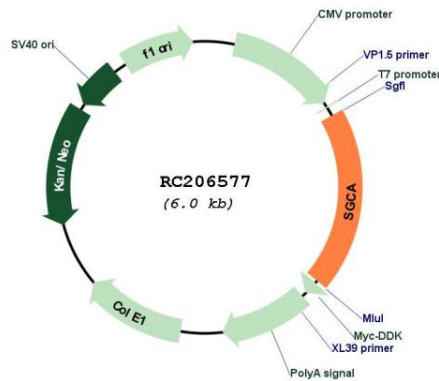
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), Viral myocarditis

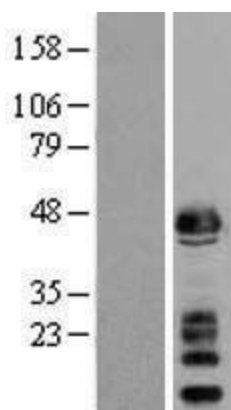
MW: 42.9 kDa

Gene Summary: This gene encodes a component of the dystrophin-glycoprotein complex (DGC), which is critical to the stability of muscle fiber membranes and to the linking of the actin cytoskeleton to the extracellular matrix. Its expression is thought to be restricted to striated muscle. Mutations in this gene result in type 2D autosomal recessive limb-girdle muscular dystrophy. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2008]

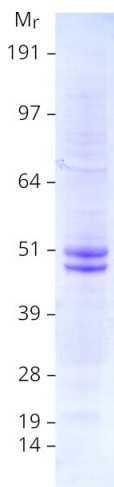
Product images:



Circular map for RC206577



Western blot validation of overexpression lysate (Cat# [LY400004]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206577 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SGCA protein (Cat# [TP306577]). The protein was produced from HEK293T cells transfected with SGCA cDNA clone (Cat# RC206577) using MegaTran 2.0 (Cat# [TT210002]).