

Product datasheet for **RG229038**

Alpha Dystroglycan (DAG1) (NM_001165928) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Alpha Dystroglycan (DAG1) (NM_001165928) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DAG1
Synonyms:	156DAG; A3a; AGRNR; DAG; LGMDR16; MDDGA9; MDDGC7; MDDGC9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG229038 representing NM_001165928
 Red=Cloning site Blue=ORF Green=Tags(s)

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 GCC**CGGATCGCC**

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AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTAA

Protein Sequence: >RG229038 representing NM_001165928
 Red=Cloning site Green=Tags(s)

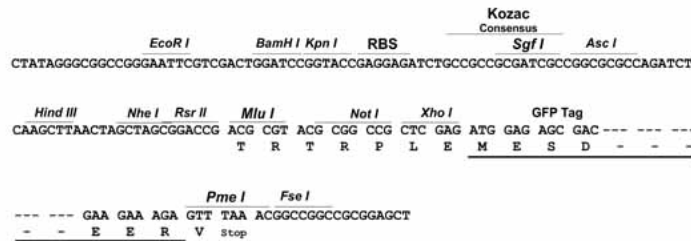
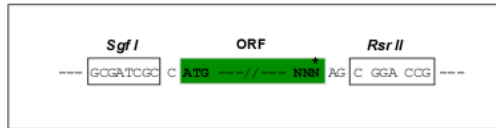
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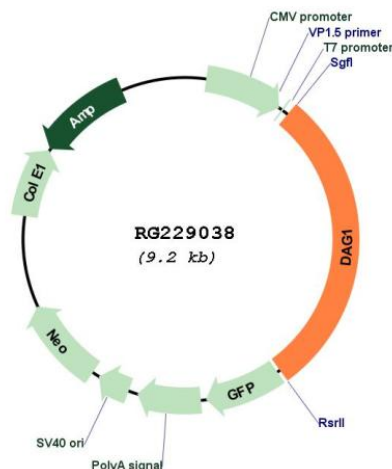
SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_001165928

ORF Size: 2685 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001165928.3 , NP_001159400.2
RefSeq Size:	5904 bp
RefSeq ORF:	2688 bp
Locus ID:	1605
UniProt ID:	Q14118
Cytogenetics:	3p21.31
Protein Families:	Druggable Genome, Secreted Protein, Transmembrane
Protein Pathways:	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, ECM-receptor interaction, Hypertrophic cardiomyopathy (HCM), Viral myocarditis
Gene Summary:	This gene encodes dystroglycan, a central component of dystrophin-glycoprotein complex that links the extracellular matrix and the cytoskeleton in the skeletal muscle. The encoded preproprotein undergoes O- and N-glycosylation, and proteolytic processing to generate alpha and beta subunits. Certain mutations in this gene are known to cause distinct forms of muscular dystrophy. Alternative splicing results in multiple transcript variants, all encoding the same protein. [provided by RefSeq, Nov 2015]