

Product datasheet for RC230571L4

OriGene Technologies, Inc.

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Alpha Dystroglycan (DAG1) (NM_001177641) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Alpha Dystroglycan (DAG1) (NM_001177641) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Alpha Dystroglycan

Synonyms: 156DAG; A3a; AGRNR; DAG; LGMDR16; MDDGA9; MDDGC7; MDDGC9

Mammalian Cell

Selection:

Puromycin

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

E. coli Selection: Chloramphenicol (34 ug/mL)

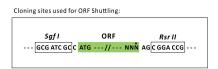
ORF Nucleotide

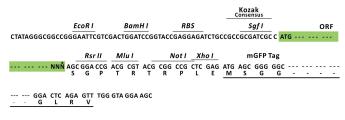
The ORF insert of this clone is exactly the same as(RC230571).

Sequence:

Restriction Sites: Sgfl-Rsrll

Cloning Scheme:



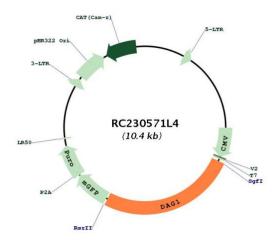


^{*} The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_001177641

ORF Size: 2685 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: <u>NM 001177641.2</u>, <u>NP 001171112.1</u>

RefSeq Size: 5690 bp **RefSeq ORF:** 2688 bp



Alpha Dystroglycan (DAG1) (NM_001177641) Human Tagged Lenti ORF Clone - RC230571L4

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

MW: 97.5 kDa

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]