

Product datasheet for **RC230038**

SAMD8 (NM_001174156) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SAMD8 (NM_001174156) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SAMD8
Synonyms:	HEL-177; SMSr
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC230038 representing NM_001174156 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGGTCCTAATCAACTCTGCATTCGCCGCTGGACTACCAAGCATGTAGCTGTGTGGCTGAAGGATG
AAGGCTTTTTGAATATGTGGACATTTATGCAATAAGCACCGACTTGATGGAATCACATTGCTAACATT
GACTGAATATGATCTCCGGTCTCCTCTGAAATCAAAGTCTTAGGGGACATTAAGGTTAATGCTC
TCAGTCCGAAAATGCAGAAAATACATATTGATGTTTTAGAAGAGATGGGCTACAACAGTGACAGTCCCA
TGGGTTCCATGACCCCTTCATCAGTGTCTTCAGAGTACAGACTGGCTCTGTAATGGGGAGCTTTCCCA
TGACTGTGACGGACCATAACTGACTTGAATTCGATCAGTACCAGTACATGAATGGTAAAAACAACAT
TCTGTTCGAAGATTGGACCCAGAATACTGGAAGACTATACTGAGTTGTATATATGTTTTATAGTATTTG
GATTTACATCTTTCATTATGGTTATAGTCCATGAGCGAGTGCCTGACATGCAGACCTATCCACCACTCCC
AGATATATTTAGACAGCGTTCCTAGAATCCCATGGGCCTTTGCCATGACGGAAGTATGTGGCATGATT
CTGTGCTATATTTGGCTCCTGGTTCTTCTTCCACAAGCACAGGTCAATACTTCTGCGAAGGCTCTGTA
GTCTGATGGAACTGTATTCTTGCTTCGCTGCTTACCATGTTTGTGACCTCCCTCTCCGTGCCAGGACA
ACACCTGCAGTGTACTGAAAAGATATATGGCAGTGTATGGGAGAAATTACATCGAGCCTTTGCCATTTGG
AGTGGCTTTGGTATGACCCTGACTGGCGTTCACACATGTGGAGATTACATGTTTGTGGCCACACAGTCCG
TCCTAACTATGCTGAATTTCTTTGTACCGAATATACACCAAGAAGCTGGAATTTCTTGACACTTTATC
CTGGGTTCTCAACCTCTTTGGAATCTTCTCATCTTGGCTGCCCATGAACATTATTCTATTGATGTGTTT
ATTGCTTTTTATATAACAACAAGACTCTTTTTGTACTACCATACTCTGGCCAATACCAGAGCATATCAGC
AGAGTAGGAGAGCAAGGATTTGGTTTCCCATGTTCTTTTTTGAATGCAATGTTAATGGCACAGTACC
TAATGAATATTGTTGGCCATTTCAAACCAGCAATAATGAAAAGACTAATTGGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online >](#)

Protein Sequence: >RC230038 representing NM_001174156
Red=Cloning site Green=Tags(s)

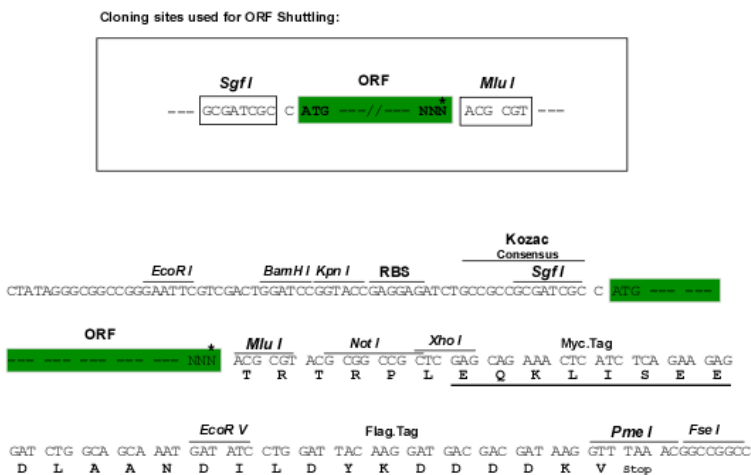
```
MAGPNQLCIRRWTTKHVAVWLKDEGFFEYVDILCNKHLRDGITLLTLTEYDLRSPPLEIKVLGDIKRLML
SVRKLQKIHDVLEEMGYNSDSPMGSMTPFISALQSTDWLCNGELSHDCDGPITDLNSDQYQYMGKNKH
SVRRLDPEYWKILSCIYVIVFGFTSFIMVIVHERVPMQTYPLPDIFLDSVPRIPWAFAMTEVCGMI
LCYIWLLVLLLHKHRSILLRRLCSLMGTVMFVLSVPGQHLQCTGKIYGSVWEKLHRAFAIW
SGFGMTLGTGHTCGDYMFSGHTVVLTMNLNFVTEYTPRSWNFLHTLSWVNLNLFGIFFILAAEHYSIDVF
IAFYITTRLFLYHTLANTRAYQQSRRARIWFPMFSSFECNVNGTVPNEYCWPFKPAIMKRLIG
```

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4428_d04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001174156

ORF Size: 1245 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).

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
 ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

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_001174156.2](#)

RefSeq ORF: 1248 bp

Locus ID: 142891

UniProt ID: [Q96LT4](#)

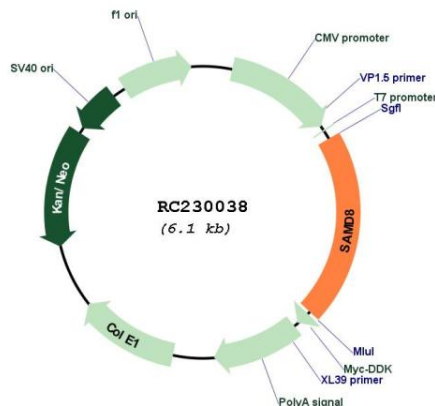
Cytogenetics: 10q22.2

Protein Families: Transmembrane

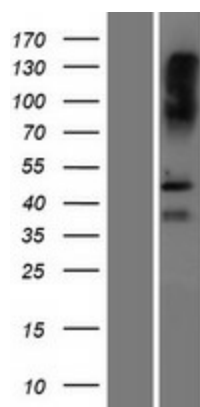
MW: 48.8 kDa

Gene Summary: Sphingomyelin synthases synthesize sphingolipids through transfer of a phosphatidyl head group on to the primary hydroxyl of ceramide. SAMD8 is an endoplasmic reticulum (ER) transferase that has no sphingomyelin synthase activity but can convert phosphatidylethanolamine (PE) and ceramide to ceramide phosphoethanolamine (CPE) albeit with low product yield. Appears to operate as a ceramide sensor to control ceramide homeostasis in the endoplasmic reticulum rather than a converter of ceramides. Seems to be critical for the integrity of the early secretory pathway.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC230038



Western blot validation of overexpression lysate (Cat# [LY433038]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230038 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).