

Product datasheet for **RG215965**

SAMD8 (NM_144660) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SAMD8 (NM_144660) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SAMD8
Synonyms:	HEL-177; SMSr
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG215965 representing NM_144660 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGGTCCTAATCAACTCTGCATTGCGCGCTGGACTACCAAGCATGTAGCTGTGTGGCTGAAGGATG
AAGGCTTTTTGAATATGTGGACATTTTATGCAATAAGCACCGACTTGATGGAATCACATTGCTAACATT
GACTGAATATGATCTCCGGTCTCCTCCTGGAATCAAAGTCTTAGGGGACATAAAAGGTTAATGCTC
TCAGTCCGAAAAATGCAGAAAAACATATTGATGTTTTAGAAGAGATGGGCTACAACAGTGACAGTCCCA
TGGGTTCCATGACCCCTTCATCAGTGTCTTTCAGAGTACAGACTGGCTCTGTAATGGGGAGCTTTCCCA
TGACTGTGACGGACCCATAACTGACTTGAATTCGATCAGTACCAGTACATGAATGGTAAAAACAAACAT
TCTGTTGGAAGATTGGACCCAGAATACTGGAAGACTATACTGAGTTGTATATATGTTTTATAGTATTTG
GATTTACATCTTTCATTATGGTTATAGTCCATGAGCGAGTGCCTGACATGCAGACCTATCCACCACTCCC
AGATATATTCTTAGACAGCGTTCCTAGAATCCCATGGGCCTTTGCCATGACGGAAGTATGTGGCATGATT
CTGTGCTATATTTGGCTCCTGGTTCTTCTTCTTCAAGCACAGGTCAATACTTCTGCGAAGGCTCTGTA
GTCTGATGGGAAGTGTATTCTTGCTTCGCTGCTTACCATGTTTGTGACCTCCCTCTCCGTGCCAGGACA
ACACCTGCAGTGTACTGGAAGATATATGGCAGTGTATGGGAGAAATTACATCGAGCCTTTGCCATTTGG
AGTGGCTTTGGTATGACCCTGACTGGCGTTCACACATGTGGAGATTACATGTTTGTAGTGGCCACACAGTCC
TCCTAACTATGCTGAATTTCTTTGTACCGAATGTAAGTATCTTTTTAGTGCTTCTATGCGTATTAGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG215965 representing NM_144660
 Red=Cloning site Green=Tags(s)

MAGPNQLCIRRWTTKHVAVWLKDEGFFEYVDILCNKHRLDGITLLTLTEYDLRSPPLEIKVLGDIKRLML
 SVRKLQKIHDVLEEMGYNSDSPMGSMTPFISALQSTDWLCNGELSHDCDGPITDLNSDQYQYMNGKNKH
 SVRRLDPEYWKILSICIYVIVFGFTSFIMVIVHERVPDMQTYPLPDIIFLDSVPRIPWAFAMTEVCGMI
 LCYIWLLVLLLHKHRSILLRRLCSLMGTVFLLRCTMFVTSLSVPGQHLQCTGKIYGSVWEKLHRAFAIW
 SGFGMTLTGVHTCGDYMFSGHTVVLTMLNFFVTECKYLFASMRIR

TRTRPLE - GFP Tag - V

Restriction Sites:

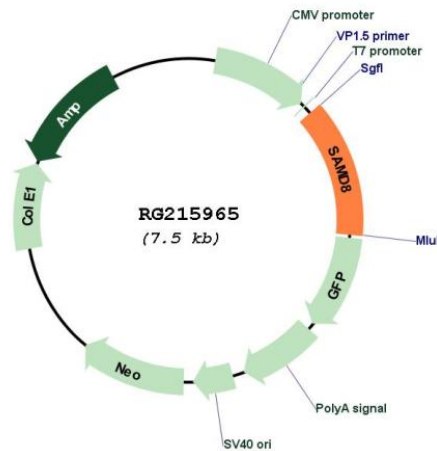
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_144660

ORF Size: 978 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:	<ol style="list-style-type: none">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_144660.3
RefSeq Size:	7009 bp
RefSeq ORF:	981 bp
Locus ID:	142891
UniProt ID:	Q96LT4
Cytogenetics:	10q22.2
Domains:	SAM
Protein Families:	Transmembrane
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]