Product datasheet for SC312970

SAMD8 (NM_144660) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SAMD8 (NM_144660) Human Untagged Clone
Tag:	Tag Free
Symbol:	SAMD8
Synonyms:	HEL-177; SMSr
Vector:	pCMV6 series
Fully Sequenced ORF:	>NCBI ORF sequence for NM_144660, the custom clone sequence may differ by one or more nucleotides

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ATGGCAGGTCCTAATCAACTCTGCATTCGCCGCTGGACTACCAAGCATGTAGCTGTGTGG
CTGAAGGATGAAGGCTTTTTTGAATATGTGGACATTTTATGCAATAAGCACCGACTTGAT
GGAATCACATTGCTAACATTGACTGAATATGATCTCCGGTCTCCTCCTCTGGAAATCAAA
GTCTTAGGGGACATTAAAAGGTTAATGCTCTCAGTCCGAAAATTGCAGAAAATACATATT
GATGTTTTAGAAGAGATGGGCTACAACAGTGACAGTCCCATGGGTTCCATGACCCCTTTC
ATCAGTGCTCTTCAGAGTACAGACTGGCTCTGTAATGGGGAGCTTTCCCATGACTGTGAC
GGACCCATAACTGACTTGAATTCTGATCAGTACCAGTACATGAATGGTAAAAACAAACAT
TCTGTTCGAAGATTGGACCCAGAATACTGGAAGACTATACTGAGTTGTATATATGTTTTT
ATAGTATTTGGATTTACATCTTTCATTATGGTTATAGTCCATGAGCGAGTGCCTGACATG
CAGACCTATCCACCACTCCCAGATATATTCTTAGACAGCGTTCCTAGAATCCCATGGGCC
TTTGCCATGACGGAAGTATGTGGCATGATTCTGTGCTATATTTGGCTCCTGGTTCTTCTT
CTTCACAAGCACAGGTCAATACTTCTGCGAAGGCTCTGTAGTCTGATGGGAACTGTATTC
TTGCTTCGCTGCTTTACCATGTTTGTGACCTCCCTCTCCGTGCCAGGACAACACCTGCAG
TGTACTGGAAAGATATATGGCAGTGTATGGGAGAAATTACATCGAGCCTTTGCCATTTGG
AGTGGCTTTGGTATGACCCTGACTGGCGTTCACACATGTGGAGATTACATGTTTAGTGGC
CACACAGTCGTCCTAACTATGCTGAATTTCTTTGTCACCGAATGTAAGTATCTTTTTAGT
GCTTCTATGCGTATTAGG
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Restriction Sites:	Please inquire
ACCN:	NM_144660
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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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_144660.1, NP_653261.1
RefSeq Size:	1505 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] Transcript Variant: This variant (2) differs in the 5' UTR, 3' UTR, and 3' coding sequence compared to variant 1. The resulting isoform (2) has a shorter and distinct C-terminus compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.