

## Product datasheet for **SC319309**

### STOML2 (NM\_013442) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids

**Tag:** Tag Free

**Symbol:** STOML2

**Synonyms:** HSPC108; SLP-2

**Mammalian Cell Selection:** Neomycin

**Vector:** pCMV6-AC (PS100020)

**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_013442.1 TC GTTGGTTCCGGAGGTCGCTGCGGCGGTGGGAAATGCTGGCGCGCGCGCGGGGCAC  
TGGGGCCCTTTTGTGAGGGGCTCTACTGGCTTCTGGCCGCGCTCCGCGCCGCGCTC  
CTCTGGATTGCCCCGAAACACCGTGGTACTGTTCTGTCGCGCAGCAGGAGGCTGGGTGGT  
GGAGCGAATGGGCCGATTCCACCGGATCCTGGAGCCTGGTTTGAACATCCTCATCCCTGT  
GTTAGACCGGATCCGATATGTCAGAGTCTCAAGGAAATTGTCATCAACGTGCCTGAGCA  
GTCGGCTGTGACTCTGACAATGTAACCTGCAAATCGATGGAGTCCTTTACCTGCGCAT  
CATGGACCCTTACAAGGCAAGCTACGGTGTGGAGGACCCTGAGTATGCCGTCACCCAGCC  
AGCTCAAACAACCATGAGATCAGAGCTCGGCAAACCTCTCTGGAACAAAGTCTTCCGGGA  
ACGGGAGTCCCTGAATGCCAGCATTGTGGATGCCATCAACCAAGCTGCTGACTGCTGGGG  
TATCCGCTGCCTCCGTTATGAGATCAAGGATATCCATGTGCCACCCCGGGTGAAGAGTC  
TATGCAGATGCAGGTGGAGGCAGAGCGCGGAAACGGGCCACAGTTCTAGAGTCTGAGGG  
GACCCGAGAGTCGGCCATCAATGTGGCAGAAGGGAAGAAACAGGCCAGATCCTGGCCTC  
CGAAGCAGAAAAGGCTGAACAGATAAATCAGGCAGCAGGAGAGGCCAGTGCAGTTCTGGC  
GAAGGCCAAGGCTAAAGCTGAAGCTATTGGAATCCTGGCTGCAGCTCTGACACAACATAA  
TGGAGATGCAGCAGCTTCACTGACTGTGGCCGAGCAGTATGTCAGCGCGTTCTCCAACT  
GGCCAAGGACTCCAACACTATCCTACTGCCCTCCAACCCTGGCGATGTCACCAGCATGGT  
GGCTCAGGCCATGGGTGTATATGGAGCCCTCACCAAAGCCCAAGTCCAGGGACTCCAGA  
CTCACTCTCCAGTGGGAGCAGCAGAGATGTCCAGGGTACAGATGCAAGTCTTGATGAGGA  
ACTTGATCGAGTCAAGATGAGTTAGTGGAGCTGGGCTTGCCAGGGAGTCTGGGGACAAG  
GAAGCAGATTTTCTGATTCTGGCTCTAGCTTCCCTGCCAAGATTTTGGTTTTATTTTT  
TTATTTGAACTTTAGTCGTGTAATAAACTCACCAGTGGCAACCAAAAAAAAAAAAAA  
AAAAAAAAAAAA

**Restriction Sites:** Please inquire

**ACCN:** NM\_013442



<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	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.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_013442.1</a> , <a href="#">NP_038470.1</a>
<b>RefSeq Size:</b>	1303 bp
<b>RefSeq ORF:</b>	1071 bp
<b>Locus ID:</b>	30968
<b>UniProt ID:</b>	<a href="#">Q9UJZ1</a>
<b>Cytogenetics:</b>	9p13.3
<b>Domains:</b>	Band_7
<b>Protein Families:</b>	Druggable Genome

**Gene Summary:**

Mitochondrial protein that probably regulates the biogenesis and the activity of mitochondria. Stimulates cardiolipin biosynthesis, binds cardiolipin-enriched membranes where it recruits and stabilizes some proteins including prohibitin and may therefore act in the organization of functional microdomains in mitochondrial membranes. Through regulation of the mitochondrial function may play a role into several biological processes including cell migration, cell proliferation, T-cell activation, calcium homeostasis and cellular response to stress. May play a role in calcium homeostasis through negative regulation of calcium efflux from mitochondria. Required for mitochondrial hyperfusion a pro-survival cellular response to stress which results in increased ATP production by mitochondria. May also regulate the organization of functional domains at the plasma membrane and play a role in T-cell activation through association with the T-cell receptor signaling complex and its regulation. [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (α).