

## Product datasheet for **SC303765**

### valyl tRNA synthetase (VARS) (NM\_006295) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	valyl tRNA synthetase (VARS) (NM_006295) Human Untagged Clone
Tag:	Tag Free
Symbol:	VARS1
Synonyms:	G7A; NDMSCA; VARS; VARS2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC303765 representing NM_006295. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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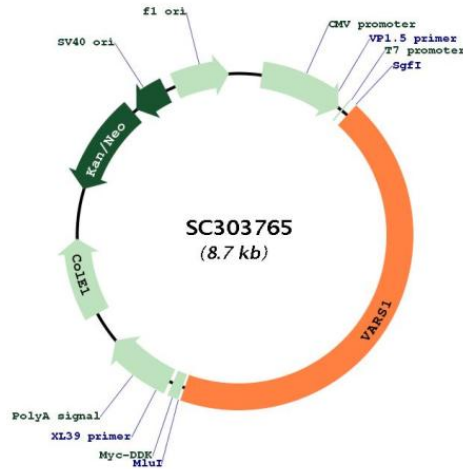
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Restriction Sites:

Sgfl-Mlul

Plasmid Map:



ACCN: NM\_006295

Insert Size: 3795 bp

**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.

**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).

<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>RefSeq:</b>	<a href="#">NM_006295.2</a>
<b>RefSeq Size:</b>	4308 bp
<b>RefSeq ORF:</b>	3795 bp
<b>Locus ID:</b>	7407
<b>UniProt ID:</b>	<a href="#">P26640</a>
<b>Cytogenetics:</b>	6p21.33
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Aminoacyl-tRNA biosynthesis, Valine, leucine and isoleucine biosynthesis
<b>MW:</b>	140.5 kDa
<b>Gene Summary:</b>	Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. The protein encoded by this gene belongs to class-I aminoacyl-tRNA synthetase family and is located in the class III region of the major histocompatibility complex. [provided by RefSeq, Jul 2008]