

## Product datasheet for **SC318220**

### **GARS1 (NM\_002047) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GARS1 (NM_002047) Human Untagged Clone
Tag:	Tag Free
Symbol:	GARS1
Synonyms:	CMT2D; DSMAV; GARS; GlyRS; HMN5; HMN5A; SMAD1; SMAJI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >SC318220 representing NM\_002047.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
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TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
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**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_002047

**Insert Size:** 2220 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).

<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>RefSeq:</b>	<a href="#">NM_002047.3</a>
<b>RefSeq Size:</b>	2432 bp
<b>RefSeq ORF:</b>	2220 bp
<b>Locus ID:</b>	2617
<b>UniProt ID:</b>	<a href="#">P41250</a>
<b>Cytogenetics:</b>	7p14.3
<b>Domains:</b>	WHEP-TRS, tRNA-synt_2b, HGTP_anticodon
<b>Protein Pathways:</b>	Aminoacyl-tRNA biosynthesis
<b>MW:</b>	83.2 kDa
<b>Gene Summary:</b>	<p>This gene encodes glycyl-tRNA synthetase, one of the aminoacyl-tRNA synthetases that charge tRNAs with their cognate amino acids. The encoded enzyme is an (alpha)<sub>2</sub> dimer which belongs to the class II family of tRNA synthetases. It has been shown to be a target of autoantibodies in the human autoimmune diseases, polymyositis or dermatomyositis. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1).</p>