

## Product datasheet for **RG232915**

### **ARSG (NM\_001267727) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ARSG (NM_001267727) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ARSG
Synonyms:	USH4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG232915 representing NM\_001267727  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGCTGGCTTTTTCTAAAGTTTTGTTGGCGGAGTGAGTTTCTCAGGATTTCTTATCTCTTGTGG  
 ATTTTTGCATCAGTGGGAAAACAAGAGGACAGAAGCCAACTTTGTGATTATTTGGCCGATGACATGGG  
 GTGGGTGACCTGGGAGCAAACCTGGGCAGAAAACAAGGACACTGCCAACCTTGATAAGATGGCTTCGGAG  
 GGAATGAGGTTTGTGGATTTCCATGCAGCTGCCTCCACCTGCTCACCTCCCGGGCTTCTTGTCTACCCG  
 GCCGGCTTGGCCTTCGCAATGGAGTCACACGCAACTTTCAGTCACTTCTGTGGGAGGCCTTCGGCTCAA  
 CGAGACCACCTTGGCAGAGGTGCTGCAGCAGCGGGTTACGTCACTGGGATAATAGGCAATGGCATCTT  
 GGACACCAGGCTCTTATCACCCAACTCCGTGGTTTTGATTACTACTTTGGAATCCCATATAGCCATG  
 ATATGGGCTGACTGATACTCCAGGCTACAACCACCTCCTTGTCCAGCGTGTCCACAGGTGATGGACC  
 ATCAAGGAACCTTCAAAGAGACTGTTACTGACGTGGCCCTCCCTCTTTATGAAAACCTCAACATTGTG  
 GAGCAGCCGGTGAACCTTGAAGCAGCTTGGCCAGAAGTATGCTGAGAAAGCAACCCAGTTCATCCAGCGTG  
 CAAGCACCAGCGGGAGGCCCTTCTGCTCTATGTGGCTCTGGCCACATGCACGTGCCCTTACCTGTGAC  
 TCAGTACCAGCAGCGCCACGGGCGAGAAGCCTGTATGGTGCAGGGCTCTGGGAGATGGACAGTCTGGTG  
 GGCCAGATCAAGGACAAAGTTGACCACACAGTGAAGGAAAACACATTCTCTGGTTTACAGGAGACAATG  
 GCCCGTGGGCTCAGAAGTGTGAGCTAGCGGGCAGTGTGGGTCCCTTCACTGGATTTTGGCAAACCTCGTCA  
 AGGGGGAAGTCCAGCCAAGCAGACGACCTGGGAAGGAGGGCACCGGTCCCAGCACTGGCTTACTGGCCT  
 GGCAGAGTCCAGTTAATGTACCAGCACTGCCTTGTAAAGCGTGTGGACATTTTCCAACCTGTGGTAG  
 CCCTGGCCAGCCAGCTTACCTCAAGGACGGCCTTTGATGGTGTGGAGCTCCGAGGTGCTCTTTGG  
 CCGGTACACAGCCTGGGCACAGGTGCTGTTCCACCCCAACAGCGGGCAGCTGGAGAGTTTGGAGCCCTG  
 CAGACTGTCCGCCTGGAGCGTTACAAGGCTTCTACATTACCGGTGGAGCCAGGGCGTGTATGGGAGCA  
 CGGGCCCTGAGCTGCAGCATAAGTTTCTCTGATTTTCAACCTGGAAGACGATACCGCAGAAGCTGTGCC  
 CCTAGAAAAGAGTGGTGCAGGAGTACCAGGCTGTGCTGCCCGAGGTGAGAAAGTTCTTGCAGACGCTCTC  
 CAAGACATTGCCAACGACAACATCTCCAGCGCAGATTACTCAGGACCCTTCACTAACCTCCCTGCTGTA  
 ATCCCTACCAAATTGCCTGCCGCTGTCAAGCCGCA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG232915 representing NM\_001267727  
 Red=Cloning site Green=Tags(s)

MGWFLKLVLLAGVSFSGFLYPLVDFCISGKTRGQKPNFVILADDMGWGDLGANWAETKDTANLDMKASE  
 GMRFVDFHAAASTCSPSRASLLTGRLGLRNGVTRNFAVTSVGGPLPLNETTLAEVLQAGYVTGIIGKWHL  
 GHHGSYHPNFRGFDYYFGIPYSHDMGCTDTPGYNHPPCPACPDGQDPSRNLQRDCYTDVALPLYENLNIV  
 EQPVNLSLAQKYAEKATQFIQRASTSGRPFLLYVALAHMHVPLPVTQLPAAPRGRSLYGAGLWEMDSL  
 GQIKDKVDHTVKENTFLWFTGDNGPWAQKCELAGSVGPFQTFWQTRQGGSPAKQTTWEGGHRVPALAYWP  
 GRVPVNVSTALLSVLDIFPTVVALAQASLPQRRFDGVDVSEVLFGRSQPGRVLFHPNSGAAGEFGAL  
 QTVRLERYKAFYITGGARACDGTGPELQHKFPLIFNLEDDTAEAVPLERGAQYAVLPEVRKVLADVL  
 QDIANDNISSADYTDPSVTPCCNPYQIACRCQAA

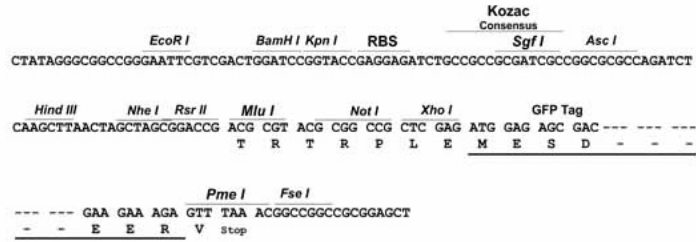
**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

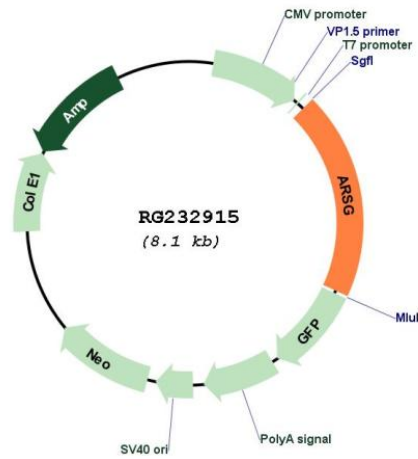
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



<b>ACCN:</b>	NM_001267727
<b>ORF Size:</b>	1575 bp
<b>OTI Disclaimer:</b>	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>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_001267727.2</a>
<b>RefSeq Size:</b>	2614 bp
<b>RefSeq ORF:</b>	1578 bp
<b>Locus ID:</b>	22901
<b>UniProt ID:</b>	<a href="#">Q96EG1</a>
<b>Cytogenetics:</b>	17q24.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Lysosome
<b>Gene Summary:</b>	The protein encoded by this gene belongs to the sulfatase enzyme family. Sulfatases hydrolyze sulfate esters from sulfated steroids, carbohydrates, proteoglycans, and glycolipids. They are involved in hormone biosynthesis, modulation of cell signaling, and degradation of macromolecules. This protein displays arylsulfatase activity at acidic pH, as is typical of lysosomal sulfatases, and has been shown to localize in the lysosomes. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jun 2012]