

Product datasheet for **SC108838**

ARSG (NM_014960) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARSG (NM_014960) Human Untagged Clone
Tag:	Tag Free
Symbol:	ARSG
Synonyms:	USH4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC108838 sequence for NM_014960 edited (data generated by NextGen Sequencing)

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ATGGGCTGGCTTTTTCTAAAGTTTTGTTGGCGGGAGTGAGTTTCTCAGGATTTCTTTAT
CCTTTGTGGATTTTTGCATCAGTGGGAAAACAAGAGGACAGAAGCCAACTTTGTGATT
ATTTTGGCCGATGACATGGGGTGGGGTGACCTGGGAGCAAAGTGGCAGAAACAAAGGAC
ACTGCCAACCTTGATAAGATGGCTTCGGAGGGAATGAGGTTTGTGGATTTCCATGCAGCT
GCCTCCACCTGCTCACCCTCCCGGGCTTCTTGTCTCACCAGCCGGCTTGGCCTTCGCAAT
GGAGTCACACGCAACTTTGCAGTCACTTCTGTGGGAGGCCTTCGCTCAACGAGACCACC
TTGGCAGAGGTGCTGCAGCAGGCGGTTACGCTACTGGGATAATAGGCAAATGGCATCTT
GGACACCACGGCTCTTATCACCCCAACTCCGTGGTTTTGATTACTACTTTGGAATCCCA
TATAGCCATGATATGGGCTGACTGATACTCCAGGCTACAACCACCCTCCTTGTCCAGCG
TGTCCACAGGGTATGGACCATCAAGGAACCTTCAAAGAGACTGTACTGACGTGGCC
CTCCCTCTTATGAAAACCTCAACATTGTGGAGCAGCCGGTGAAGTGTGAGCAGCCTTGGC
CAGAAGTATGCTGAGAAAGCAACCCAGTTCATCCAGCGTGAAGCACCAGCGGGAGGCC
TTCTGCTCTATGTGGCTGTGGCCACATGCACGTGCCCTTACCTGTGACTCAGCTACCA
GCAGCGCCACGGGCGAGAACCTGTATGGTGCAGGGCTCTGGGAGATGGACAGTCTGGTG
GGCCAGATCAAGGACAAAAGTTGACCACACAGTGAAGGAAAACACATTCCTCTGGTTTACA
GGAGACAATGGCCCGTGGGCTCAGAAGTGTGAGTAGCGGGCAGTGTGGTCCCTTCACT
GGATTTTGGCAAACCTCGTCAAGGGGGAAGTCCAGCCAAGCAGACGACCTGGGAAGGAGGG
CACCGGGTCCCAGCACTGGCTTACTGGCCTGGCAGAGTCCAGTTAATGTACCAGCACT
GCCTTGTAAAGCGTGTGGACATTTTTCCAAGTGTGGTAGCCCTGGCCAGGCCAGCTTA
CCTCAAGGACGGCGCTTGTATGGTGTGGACGTCTCCGAGGTGCTTTTGGCCGGTACAG
CCTGGGCACAGGGTGTGTTCCACCCCAACAGCGGGGCAGCTGGAGAGTTTGGAGCCCTG
CAGACTGTCCGCCTGGAGCGTTACAAGGCCTTCTACATTACCGGTGGAGCCAGGGCGTGT
GATGGGAGCACGGGCGCTGAGCTGCAGCATAAGTTTTCTCTGATTTTCAACCTGGAAGAC
GATACCGCAGAAGCTGTGCCCTAGAAAGAGGTGGTGGGAGTACCAGGCTGTGTGCC
GAGGTCAGAAAGTTCTTGCAGACGTCTCCAAGACATTGCCAACGACAACATCTCCAGC
GCAGATTACTCAGGACCCTTCAGTAACCTCCTGCTGTAATCCCTACCAAATTGCCTGC
CGCTGTCAAGCCGATAA
    
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Clone variation with respect to NM_014960.3

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_014960 unedited
TACGACTACTATAGGGCGGCCGGAATTCGGCACGAGGCACGTGGACCTGAGCCGCGCC
GGTCGCGCGCCCGCCAGCCTGCCGCTGGGCTGGGGTACGAAAGGAAACCTTACAGAA
ACATGAAGCCCTCAACCATCTGCTACTCAGTTATTCGGGGCTGACGGCGGCTTCTAGAAC
ATCCAGGTGTTCTGCAGATGCGAGAACTCATCCTGTAGTACCAGATGGAGTCCCAAACA
GCCAAGCAGATGTAAGGCCTGTGCTGTGGCTCTGAGGCCCTGAATACAGAAGGGTCACTT
TCTTAGTGGCCAAAGAGCAGTTGTTGACATTGATGTCTAATTATTGAACACGACCAGTCA
TTTTACTGAGCTGCAGTGAAGAACTGACCATAGAAGATCAAGCCAAATGAGGGATTG
CAAATTTCTGATTCTTTTGAATTAGGATTCCAGATGGGGCCTCATTCTACAGCCCC
AACATTCCTATAGCCGTTACTGCTGCCATCACCCTGCCACCAGCATCTTCTGCAGATT
CCACCCCTGCTCCCAGAGACTTCTGCTTTGAAAGTGAAGCAGAAAGGAAGCTCTCAGAA
AAATCTCTAGTGGTGGCTGCCGTCGCTCCAGACAATCGGAATCCTGCCTTACCACCATG
GGCTGGCTTTTTCTAAGTTTTGTTGGCGGGAGTGAGTTTCTCAGGATTTCTTTATCCTC
TTGTGGNATTTTGCATCAGTGGGAANAACAGAGACAGAAGCCAACTTTGTGATTATTT
TGGCCGATGACATGGNGTGGGGGTGACCTGNNAGCAACTGGGCAGAAACAAAGGACACT
GNNCACCTTTGATAGAAATGGCTTNCGNAGGNAATGANGGTTGTGGNNATTTCCATGCAN
NTGCCTNCACCTGCTCACCCTCCAGGCTTNNCTGCTCACCAGGCGNCTNGGNCNNCT
GCATGGNAGTCACCACGCACCTTNGCAGTCACTTCTGTGGGN
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_014960 unedited GCGGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTTCATGTATGCCTTTATTTAAC CCTCAAAATCAACTTGCAGGTTAGGTTAAACAATTGCCCAAGTTCAAAAGCTGGAGCTGG CACCTGTGCCTGACTCCAAAGCCCGTGTGCTTCCCATTAAAGGCACACTCCCTGCCAGAG CCAGCGCAGCTCAGCTGCTCTCGGGTCGGCGTGGAGGAGGACAGGATACAGAAGGGATA TGCAAGGCTAACTCCAAAATAAATACTCAAGACTAAACTAAAGCGTGTGTTTGTAAGAG GGTAAAAATGAAATTTGGAAGCAAACCTTGCCTAATTTCCAGTACTCCTCCTCGTGGAAAT AAAAATTGGTCTGTTATGCGGCTTGACAGCGGCAGGCAATTTGGTAGGGATTACAGCAGG GAGTTACTGAAGGGTCTGAGTGAATCTGCGCTGGAGATGTTGTCGTTGGCAATGCCTT GGAGGACGTCTGCAAGAACCTTTCTGACCTCGGGCAGCACAGCCTGGTACTCCGCACCAC CTCTTTCTAGGGGCACAGCTCCTGCGGTATCGTCTTCCAGTTGAAAATCAGAGGAAACTT ATGCTGCAGCTCAGGGCCCGTCCATCACAACGCTCTTGCTTACCCTAATGTAAAGG CCTTGTACGCTCCGGCCGACAGTCTGAAGGCTCCAAAATCTTCAGTTGCCCGGTGTTGGG GTGAACAGCACCTGGGCCAGCTGGGACCGCCAAGACACCTCGGAACGTACCCATTTA AGCCCCGTTCTTGAGGAACTGCCCGGCCAGGTCTACCAGTAAAAAACCCAGCCCCC TTAAAAGCAACGCTGAGAATTACTGAACTCCGCCAGCCAAAGCCATGTTGGACCCGGGCC CTTCTCCCGACGCTGTTTGCTGACTCTCCTGGAGAGTTGAAACCAGGAAGGCCAC TGCCCTTATTACTTTGACCCAGGCCTTGTCTGAACCAGAAGG
Restriction Sites:	ECORI-NOT
ACCN:	NM_014960
Insert Size:	2560 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).
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:	<ol style="list-style-type: none"> 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:	<u>NM_014960.1</u> , <u>NP_055775.1</u>
RefSeq Size:	4304 bp
RefSeq ORF:	1578 bp
Locus ID:	22901
UniProt ID:	<u>Q96EG1</u>
Cytogenetics:	17q24.2
Domains:	Sulfatase

Protein Families: Druggable Genome

Protein Pathways: Lysosome

Gene Summary: 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]
Transcript Variant: This variant (1) represents the longer transcript. Variants 1 and 2 encode the same protein.