

## Product datasheet for **SC125031**

### ARSB (NM\_198709) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ARSB (NM_198709) Human Untagged Clone
Tag:	Tag Free
Symbol:	ARSB
Synonyms:	ASB; G4S; MPS6
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_198709, the custom clone sequence may differ by one or more nucleotides

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ATGGGTCCGCGCGGCGCGGCGAGCTTGCCCGAGGCCCGGACCTCGGCGGCTGCTCCTCCCGTCGTCC
TCCCGCTGCTGCTGCTGCTGTTGTTGGCGCCGCCGGGCTCGGGCGCCGGGGCCAGCCGGCCGCCACCT
GGTCTTCTTGCTGGCAGACGACCTAGGCTGGAACGACGTCGGCTTCCACGGCTCCCGCATCCGCACGCCG
CACCTGGACGCGCTGGCGGCCGGCGGGGTGCTCCTGGACAACACTACACGCAGCCGCTGTGCACGCCGT
CGCGGAGCCAGCTGCTCACTGGCCGCTACCAGATCCGTACAGGTTTACAGCACCAATAATCTGGCCCTG
TCAGCCAGCTGTGTTCTCTGGATGAAAACTCCTGCCCGAGCTCCTAAAAGAAGCAGGTTATACTACC
CATATGGTCGAAAATGGCACCTGGGAATGTACCGAAAAGAATGCCTTCCAACCCGCCGAGGATTTGATA
CCTACTTTGGATATCTCCTGGGTAGTGAAGATTATTATCCCATGAACGCTGTACATTAATTGACGCTCT
GAATGTACACGATGTGCTCTTGATTTTCGAGATGGCGAAGAAGTTGCAACAGGATATAAAAAATATGAT
TCAACAAACATATTCACAAAAGGGCTATAGCCCTCATAACTAACCATCCACCAGAGAAGCCTCTGTTTC
TCTACCTTGCTCTCCAGTCTGTGCATGAGCCCTTCAGGTCCTGAGGAATACTTGAAGCCATATGACTT
TATCCAAGACAAGAACAGGCATCACTATGCAGGAATGGTGTCCCTTATGGATGAAGCAGTAGGAAATGTC
ACTGCAGCTTTAAAAGCAGTGGGCTCTGGAACAACACGGTGTTCATCTTTCTACAGATAACGGAGGGC
AGGCTTTGGCAGGGGTAATAACTGGCCCTTCGAGGAAGAAAATGGAGCCTGTGGGAAGGAGGCGTCCG
AGGGGTGGGCTTTGGCAAGCCCTTGCTGAAGCAGAAGGGCGTGAAGAACCAGGAGCTCATCCACATC
TCTGACTGGCTGCCAACACTCGTGAAGCTGGCCAGGGGACACACCAATGGCACAAGCCTCTGGATGGCT
TCGACGTGTGAAAACCATCAGTGAAGGAAGCCATCCCCAGAATTGAGCTGCTGCATAATATTGACCC
GAACTTCGTGGACTCTTACCCTACTGGCTGAGTGTGCTGCTGCTGTTGTAG
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_198709 unedited GGGCGTCCAAATTTGTATACGACTCACTATAGGCGGCCGCAATTCGCACGAGGGCTGG TGGCGCCACAGGCCTGGGACCGCGGGCGGACAAGGATGGGTCCGCGCGGGCGGCGAGC TTGCCCCGAGGCCCGGACCTCGGCGGCTGCTCCTCCCGTCGTCTCCCGCTGCTGCTG CTGCTGTTGTTGGCGCCCGGGCTCGGGCGCCGGGGCCAGCCGGCCGCCACCTGGTC TTCTTGCTGGCAGACGACCTAGGCTGGAACGACGTCGGCTTCCACGGCTCCCGCATCCGC ACGCCGACCTGGACGCGTGGCGGCGGGGCTGCTCCTGGACAACACTACACGCAG CCGCTGTGCACGCGTCCGCGGAGCCAGCTGCTCACTGGCCGCTACCAGATCCGTACAGGT TTACAGCACCAAATAATCTGGCCCTGTCAGCCCAGCTGTGTTCCCTCTGGATGAAAAACTC CTGCCCCAGCTCCTAAAAGAAGCAGTTATACTACCCATATGGTCGAAAAATGGCACCTG GGAATGTACCGGAAAGAATGCCTTCCAACCCGCGGAGGATTTGATACCTACTTTGGATAT CTCCTGNGTAGTGAAGATTATTATCCCATGAACGCTGTACATTAATTGACGCTCTGAAT GTCACACGATGTGCTCTTGATTTTCGAGATGGCGAAGAAGTTGCAACAGGATATAAAAAT ATGTATTCAACAAACATATTCACAAAAGGGCTATAGCCCTCATAACTAACCATCCACCA GAGAAGCCTCTGTTTCTACTACCTTGCTCTCCAGTCTGTGCATGAGCCCTTCANGTCCCT GAGGAATACTGNAGCCATATGACTNTATCCCCAGACAGACAGGCATCACTTGCAA
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_198709
<b>Insert Size:</b>	2600 bp
<b>OTI Disclaimer:</b>	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>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_198709.1</a> , <a href="#">NP_942002.1</a>
<b>RefSeq Size:</b>	1983 bp
<b>RefSeq ORF:</b>	1242 bp
<b>Locus ID:</b>	411
<b>UniProt ID:</b>	<a href="#">P15848</a>
<b>Cytogenetics:</b>	5q14.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Glycosaminoglycan degradation, Lysosome, Metabolic pathways

**Gene Summary:**

Arylsulfatase B encoded by this gene belongs to the sulfatase family. The arylsulfatase B homodimer hydrolyzes sulfate groups of N-Acetyl-D-galactosamine, chondroitin sulfate, and dermatan sulfate. The protein is targeted to the lysosome. Mucopolysaccharidosis type VI is an autosomal recessive lysosomal storage disorder resulting from a deficiency of arylsulfatase B. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Dec 2016]

Transcript Variant: This variant (2) has an alternate 3' sequence, as compared to variant 1. The resulting isoform 2 has a distinct and shorter C-terminus, as compared to isoform 1.

Sequence Note: This RefSeq record was created from transcript and genomic sequence data because transcript sequence consistent with the reference genome assembly was not available for all regions of the RefSeq transcript. The extent of this transcript is supported by transcript alignments.