

Product datasheet for **SC119855**

ARSA (NM_000487) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARSA (NM_000487) Human Untagged Clone
Tag:	Tag Free
Symbol:	ARSA
Synonyms:	ASA; MLD
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 SC119855 sequence for NM_000487 edited (data generated by NextGen Sequencing)

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ATGTCCATGGGGGACCGCGGTCCCTCCTCCTGGCCCTGGCTGCTGGCCTGGCCGTTGCC
CGTCCGCCCAACATCGTGCTGATCTTTGCCGACGACCTCGGCTATGGGGACCTGGGCTGC
TATGGGCACCCAGCTCTACCACTCCCAACCTGGACCAGCTGGCGGGGGAGGGCTGCGG
TTCACAGACTTCTACGTGCCTGTGTCTGTGTCACACCCTTAGGGCCGCCCTCCTGACC
GGCCGGTCCCGGTTTCGGATGGGCATGTACCCTGGCGTCTGGTGCCAGCTCCCGGGGG
GGCCTGCCCTGGAGGAGGTGACCGTGGCCGAAGTCTGGCTGCCGAGGCTACCTCACA
GGAATGGCCGGCAAGTGGCACCTTGGGGTGGGGCTGAGGGGGCCTTCTGCCCCCAT
CAGGGCTTCCATCGATTTCTAGGCATCCCGTACTCCACGACCAGGGCCCTGCCAGAAC
CTGACCTGCTTCCCGCCGCCACTCCTTGCACGGTGGCTGTGACCAGGGCCTGGTCCCC
ATCCCACTGTTGGCCAACCTGTCCGTGGAGGCGCAGCCCCCTGKCTGCCCGGACTAGAG
GCCCGCTACATGGCTTTCGCCCATGACCTCATGGCCGACGCCAGCGCCAGGATCGCCCC
TTCTTCTGTACTATGCCTCTCACCACACCCACTACCCTCAGTTCAGTGGGCAGAGCTTT
GCAGAGCGTTTCAGGCCGGGGCCATTTGGGGACTCCCTGATGGAGCTGGATGCAGCTGTG
GGGACCCTGATGACAGCCATAGGGGACCTGGGGTGTGTTGAAGAGACGCTGGTCACTTC
ACTGCAGACAATGGACCTGAGACCATGCGTATGTCCCGAGGCGGGTGTCCGGTCTCTTG
CGGTGTGGAAGGGAACGACCTACGAGGGCGGTGTCCGAGAGCCTGCCTTGGCCTTCTGG
CCAGGTATATCGCTCCCGCGGTGACCCACGAGCTGGCCAGCTCCCTGGACCTGTGCCT
ACCCTGGCAGCCCTGGCTGGGGCCCCACTGCCARTGTACCTTGGATGGCTTTGACCTC
AGCCCCCTGTGCTGGGCACAGGCAAGAGCCCTCGGCAGTCTCTTCTTCTACCCGTCC
TACCCAGACGAGGTCCGTGGGGTTTTTGTGTGCGGAGTGGAAAGTACAAGGCTCACTTC
TTACCCAGGGCTCTGCCACAGTGTATACCACTGCAGACCCTGCCTGCCACGCCTCCAGC
TCTGTGACTGCTCATGAGCCCCCGTCTATGACCTGTCCAAGGACCCCTGGTGAAGAAC
TACAACCTGCTGGGGGTGTGGCCGGGGCCACCCAGAGGTGCTGCAAGCCCTGAAACAG
CTTCAGCTGCTCAAGGCCAGTTAGACGCAGCTGTGACCTTCGGCCCCAGCCAGGTGGCC
CGGGGCGAGGACCCCGCCTGCAGATCTGCTGTATCCTGGTGCACCCCCRCCAGCT
TGCTGCCATTGCCAGATCCCATGCCTGA
    
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Clone variation with respect to NM_000487.5
 585 g=>k;1055 a=>r;1178 c=>g;1493 g=>r

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000487 unedited

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ACCTCTGGATTTGTATCCGACTTCTATAGGCGGCCGCGCATTCCGGCACGAGGCCGGCCCCG
ACTCCGCTGGTCAGCGCCAAGTACTTACGCCCCGACCTGAGCCCGGACCGCTAGGCG
AGGAGGATCAGATCTCCGCTCGAGAATCTGAAGGTGCCCTGGTCTGGAGGAGTCCGTC
CCAGCCCGCGGTCTCCCGTACTGTCCGGCCCCGGCCCTCTGGAGCTTCAGGAGGCGGCC
GTCAGGGTCGGGAGTATTTGGTCCGGGTCTCAGGAAAGGGCGCGCCTGGGTCTGCG
GTATCGGAAAGAGCCTGCTGGAGCCAAGTAGCCCTCCCTCTCTTGGGACAGACCCCTCGG
TCCCATGTCCATGGGGGACCGCGGTCCCTCCTCCTGGCCCTGGCTGCTGGCCTGGCCGT
TGCCCGTCCGCCAACATCGTGCTGATCTTTGCCGACGACCTCGGCTATGGGGACCTGGG
CTGCTATGGGCACCCAGCTCTACCACTCCCAACCTGGACCAGCTGGCGGGGGAGGGCT
GCGGTTACAGACTTCTACGTGCCTGTGTCTGTGTCACACCCTTAGGGCCGCCCTCCT
GACCGGCCGCTCCCGTTCGGATGGGCATGTACCCTGGCGTCTGGTGGCCAGCTCCCG
GGGGGGCTGCCCTGGAGGAGGTGACCGTGGCCGAAGTCTGGCTGCCGAGGCTACCT
CACAGGAATGGCCGGCAAGTGGACCTTAGGGTGGGGCCTGAGGGGGCCTTCTGCCCC
CATCAAGGCTTCCATCGATTTCTAGGCATCCCGTACTCCACGACCAGAGCCCTGCCAG
AACCTGACCTGCTTCNNGCGGCCACTCCTTGCACGGTGG
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_000487 unedited TAGAGTCGAGTTTTTTTTTTTTTTTTTTTGAAGTCTCCACTGGTGTATTACGTTATCAG GCACAAACCCCTCCAGACACCTGAGCCTCCCCACAGGCTCCCAGTGAGGAGCCATCAC ATGCCCAGGCCAGCCGAGGGGCCCTCAGGCATGGGGATCTGGGCAATGGCAGCAAGCTGG GCGGGGGTGCAGCCAGGATGACAGCAGATCTGCAGGGCGGGTCTCGCCCCGGCCAC CTGGCTGGGGCCGAAGGTCACAGCTGCGTCTAACTGGGCTTGAGCAGCTGAAGTGTTT CAGGGCTTGACGACACCTCTGGGGTGGCCCCGCCACACCCCCAGCAGGTTGTAGTTCTC ACCAGGGTCCTTGGACAGGTCATAGAGCAGCGGGGGCTCATGAGCAGTCACAGAGCTGGA GGCGTGGCANGCAGGTTCTGCACTGTTGCACTGTGGGCAAGCCCTGGGTGAAGAATGA GCCCTGTACTTCCCCTTCCCAAGCAAAACCCACGACCCTCCCCTGGGAAGACGGGATTA AAAAGGAGACTGGCCAGGGCTCTTGCTGGCCACAGCAAGGGCTGATGCAAACCTTCA AGGGACATTGGCACGGGGGCCAACAGGGTTGCACGTAAGCAAAGGTCAGGGACCGCCCA CTTTGGGACCGCCGAACCAAATAACTGCCCAAGGCCAGCAGTCTTGCCCCCCTG AGGGCGTCCCTTCCACCCCATAAACCGAACACCCCTGGAACACCCGGGCCAAGTCATT GCCGCATAAAATCCCGTCTCTTAAACACCCAGCCCCCTGCGTGCCAGGGCCCCACTGC CCCTCCTTGGAGACCAAGGTCCTCGCCACCTCTTAAACTTCTCACTAAGGATCGGG TTGCGATACTCATCAAATAGGCATTTGCTTGTCCCCCTGCCTATACCCCATCCCC TCCTCAN
Restriction Sites:	NotI-NotI
ACCN:	NM_000487
Insert Size:	2190 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_000487.3</u> , <u>NP_000478.2</u>
RefSeq Size:	2039 bp
RefSeq ORF:	1524 bp
Locus ID:	410
UniProt ID:	<u>P15289</u>
Cytogenetics:	22q13.33
Domains:	Sulfatase

Protein Families: Druggable Genome

Protein Pathways: Lysosome, Sphingolipid metabolism

Gene Summary: The protein encoded by this gene hydrolyzes cerebroside sulfate to cerebroside and sulfate. Defects in this gene lead to metachromatic leucodystrophy (MLD), a progressive demyelination disease which results in a variety of neurological symptoms and ultimately death. Alternatively spliced transcript variants have been described for this gene. [provided by RefSeq, Dec 2010]
Transcript Variant: This variant (1) represents the longest transcript and it encodes the longer protein (isoform a). Variants 1, 2, 3, and 4 encode the same isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.