

## Product datasheet for **RC213072**

### ARSA (NM\_001085425) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ARSA (NM_001085425) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ARSA
Synonyms:	ASA; MLD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC213072 representing NM\_001085425  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCATGCGGGACCGCGGTCCCTCCTCGCCCTGGCTGCTGGCCCTGGCCGTGCCCCGTCGCCCA  
 ACATCGTCTGATCTTTGCCGACGACCTCGGCTATGGGGACCTGGGCTGCTATGGGCACCCAGCTCTAC  
 CACTCCCAACCTGGACCAGCTGGCGGCGGGAGGGCTGCGGTTACAGACTTCTACGTGCCTGTGTCTCTG  
 TGCACACCCTCTAGGGCCGCCCTCTGACCGGCCGGCTCCCGGTTGCGATGGGCATGTACCTGGCGTCC  
 TGGTGCCAGCTCCCGGGGGGCTGCCCTGGAGGAGGTGACCGTGGCCGAAGTCTGGCTGCCGAGG  
 CTACCTCACAGGAATGGCCGCAAGTGGCACCTTGGGGTGGGGCTGAGGGGGCTTCTGCCCCCCAT  
 CAGGGCTTCCATCGATTCTAGGCATCCCGTACTCCACGACCAGGGCCCTGCCAGAACCTGACCTGCT  
 TCCCGCCGGCCACTCCTTGCACGGTGGCTGTGACCAGGGCTGGTCCCATCCACTGTTGGCCAACT  
 GTCGTGGAGGCGCAGCCCCCTGGCTGCCCGACTAGAGGCCGCTACATGGCTTTCGCCCATGACCTC  
 ATGGCCGACGCCAGCGCCAGGATCGCCCTTCTTCTGTACTATGCCTCTACCCACACCCACTACCTC  
 AGTTCAAGTGGGCAGAGCTTTCAGAGCGTTTCAGGCCGCGGGCCATTTGGGACTCCCTGATGGAGCTGGA  
 TGCAGCTGTGGGACCTGATGACAGCCATAGGGGACCTGGGGCTGCTTGAAGAGACGCTGGTCACTTC  
 ACTGCAGACAATGGACCTGAGACCATGCGTATGTCCCAGGCGGCTGCTCCGGTCTTTCGGGTGTGGAA  
 AGGGAACGACCTACGAGGGCGGTGTCCGAGAGCCTGCCTTGGCCCTTGGCCAGGTCATATCGCTCCCGG  
 CGTGACCCACGAGCTGGCCAGCTCCCTGGACCTGCTGCCTACCTGGCAGCCCTGGCTGGGGCCCACTG  
 CCCAATGTACCTTGGATGGCTTTCAGCTCAGCCCCCTGCTGCTGGGCACAGGCAAGAGCCCTCGGCAT  
 CTCTCTTCTTACCCGCTCTACCCAGAGGCTCGCCACAGTGATACCACTGCAGACCCTGCCTGCCACGCTCCAGC  
 TCTCTGACTGCTCATGAGCCCCGCTGCTATGACCTGTCCAAGACCTGGTGAAGTACAACCTGC  
 TGGGGGTGTGGCCGGGCCACCCAGAGGTGCTGCAAGCCCTGAAACAGCTTCACTGCTCAAGGCCCA  
 GTTAGACGACGCTGTGACCTTCGGCCCCAGCCAGGTGGCCGGGGCGAGGACCCCGCCCTGCAGATCTGC  
 TGTATCTGGCTGCACCCCGCCAGCTTGTGCCATTGCCAGATCCCATGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC213072 representing NM\_001085425  
 Red=Cloning site Green=Tags(s)

MSMGAPRSLLLAAGLAVARPPNIVLIFADDLGYDGLGICYGHPSSSTPNLDQLAAGGLRFTDFYVPVSL  
 CTPSRAALLTGRLPVRMGMYPGVLPSSRGGPLEEVTVAEVLAAARGYLTMAGKWHLGVGPEGAFLPPH  
 QGFHRFLGIPYSHDQGPCQNLTCFPPATPCDGGCDQGLVPIPLLANLSVEAQPWLPGLEARYMAFAHDL  
 MADAQRQDRPFLLYYASHHHTYPQFSGQSFASRGRPFGDSLMELEDAVGTLMTAIGDLGLEETLVIF  
 TADNGPETMRMSRGGCSGLLRGKGTTYEGGVREPALAFWPGHIAPGVTHELASSLDLLPTLAALAGAPL  
 PNVTLDFDLSPLLLGTGKSPRQSLFFYPSYPDEVRGVFAVRTGKYKAHFFTQGSASDITADPACHASS  
 SLTAHEPPLLVDLSDKDPGENYNLLGGVAGATPEVLQALKQLQLLKAQLDAAVTFGPSQVARGEDPALQIC  
 CHPGCTPRPACCHCPDPA

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8078\\_a03.zip](https://cdn.origene.com/chromatograms/mk8078_a03.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001085425

**ORF Size:** 1527 bp

**OTI Disclaimer:** 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. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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:**
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:** [NM\\_001085425.3](#)

**RefSeq Size:** 1966 bp

**RefSeq ORF:** 1530 bp

**Locus ID:** 410

**UniProt ID:** [P15289](#)

**Cytogenetics:** 22q13.33

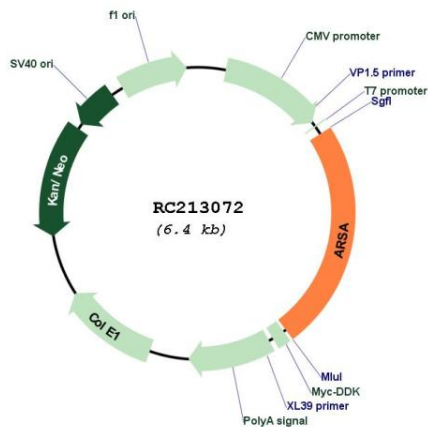
**Protein Families:** Druggable Genome

**Protein Pathways:** Lysosome, Sphingolipid metabolism

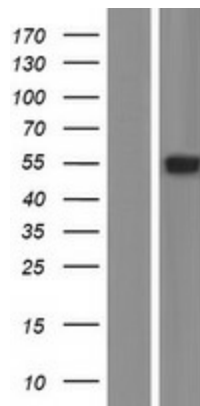
**MW:** 53.81 kDa

**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]

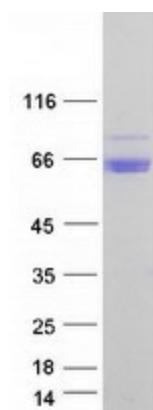
**Product images:**



Circular map for RC213072



Western blot validation of overexpression lysate (Cat# [LY421293]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213072 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ARSA protein (Cat# [TP313072]). The protein was produced from HEK293T cells transfected with ARSA cDNA clone (Cat# RC213072) using MegaTran 2.0 (Cat# [TT210002]).