

## Product datasheet for **RC213161**

### ARSA (NM\_001085427) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ARSA (NM_001085427) 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:**

>RC213161 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGGGCACCGGGTCCCTCCTCTGGCCCTGGCTGCTGGCCTGGCCGTGCCCGTCCGCCAACATCG  
 TGCTGATCTTTGCCGACGACCTCGGCTATGGGGACCTGGGCTGCTATGGGCACCCAGCTTACCACTCC  
 CAACCTGGACCAGCTGGCGGGGGAGGGTTCGGTTTACAGACTTCTACGTGCCTGTGTCTCTGTGCACA  
 CCCTCTAGGGCCGCCCTCCTGACCGGCCGGCTCCCGTTTCGGATGGGCATGTACCCTGGCGTCTGGTGC  
 CCAGCTCCCGGGGGGCCCTGCCCTGGAGGAGGTGACCGTGGCCGAAGTCTGGCTGCCCGAGGCTACCT  
 CACAGGAATGGCCGCAAGTGGCACCTTGGGGTGGGGCTGAGGGGGCTTCTGCCCCCCATCAGGGC  
 TTCCATCGATTTCTAGGCATCCCGTACTCCACGACCAGGGCCCTGCCAGAACCTGACCTGCTTCCCGC  
 CGGCCACTCCTTGCAGCGTGGCTGTGACCAGGGCCTGGTCCCCATCCACTGTTGGCCAACTGTCCGT  
 GGAGGCGCAGCCCCCTGGCTGCCCGACTAGAGGCCCGCTACATGGCTTTCGCCATGACCTCATGGCC  
 GACGCCACAGCCAGGATCGCCCCCTTCTCCTGTACTATGCCTCTCACCACCCACTACCTCAGTTCA  
 GTGGGCAGAGCTTTCAGAGCGTTCAGGCCGCGGGCCATTTGGGGACTCCCTGATGGAGCTGGATGCAGC  
 TGTGGGGACCCTGATGACAGCCATAGGGGACCTGGGGCTGCTTGAAGAGACGCTGGTCACTTCACTGCA  
 GACAATGGACCTGAGACCATGCGTATGTCCCGAGGCGGCTGCTCCGGTCTTTCGGGTGTGGAAAGGGAA  
 CGACCTACGAGGGCGGTGTCGAGAGCCTGCCTTGGCCTTCTGGCCAGGTCAATCGCTCCCGCGTGC  
 CCACGAGCTGGCAGCTCCCTGGACCTGCTGCCTACCTGGCAGCCCTGGCTGGGGCCCCACTGCCAAT  
 GTCACCTGGATGGCTTTCAGCTCAGCCCCCTGCTGCTGGGCACAGGCAAGAGCCCTCGGCAGTCTCT  
 TCTTCTACCCGCTCCTACCCAGAGGCTCGCCACAGTGATACCACTGCAGACCCTGCCTGCCACGCTCCAGCTCTG  
 ACTGCTCATGAGCCCCGCTGCTCTATGACCTGTCCAAGACCCTGGTGAGAACTACAACCTGCTGGGG  
 GTGTGGCCGGGGCCACCCAGAGGTGCTGCAAGCCTGAAACAGCTTCACTGCTCAAGGCCAGTTAGA  
 CGCAGCTGTGACCTTCGGCCCCAGCAGGTGGCCCGGGCGAGGACCCCGCCCTGCAGATCTGCTGCAT  
 CCTGGCTGCACCCCCGCCAGCTTGTGCCATTGCCAGATCCCCATGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC213161 protein sequence  
 Red=Cloning site Green=Tags(s)

MGAPRSLLLALAAGLAVARPPNIVLIFADDLGYGDLGCGYGHPSSTTPNLDQLAAGLRFDFYVPVSLCT  
 PSRAALLTGRLPVRMGMYPGVLVPSSRGGLEEVTVAEVLAARGYLTMAGKWHLGVGPEGAFLPPHQG  
 FHRFLGIPYSHDQGPCQNLTCTFPATPCDGGCDQGLVPIPLLANLSVEAQPPWLPGLARYMAFAHDLMA  
 DAQRQDRPFLLYYASHHHTYPQFSGQSFASRGRPFSDSLMELDAAVGTLMTAIGDLGLEETLVIFTA  
 DNGPETMRMSRGGCSLLRRCGKTTYEGGVREPALAFWPWHIAPGVTHELASSLDLLPTLALAGAPLPN  
 VTLDGFDLSPLLLGTGKSPRQSLFFYPSYPDEVRGVFAVRSKYKAHFFTQGSAHSDTTADPACHSSSL  
 TAHEPPLLVDLSDKDPGENYNLLGGVAGATPEVLQALKQLLKAQLDAAVTFGPSQVARGEDPALQICCH  
 PGCTPRPACCHCPDPA

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6247\\_d09.zip](https://cdn.origene.com/chromatograms/mk6247_d09.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001085427

**ORF Size:** 1521 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\\_001085427.3](#)

**RefSeq Size:** 4127 bp

**RefSeq ORF:** 1530 bp

**Locus ID:** 410

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

**Cytogenetics:** 22q13.33

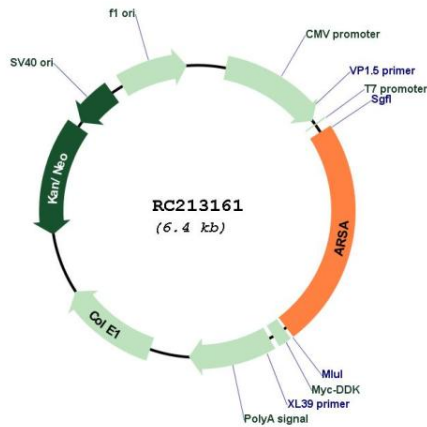
**Protein Families:** Druggable Genome

**Protein Pathways:** Lysosome, Sphingolipid metabolism

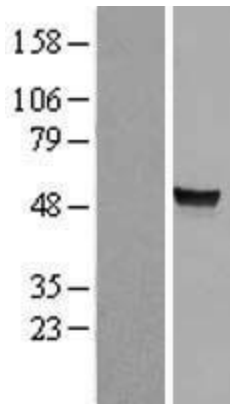
**MW:** 53.6 kDa

**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]

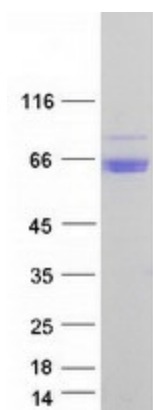
**Product images:**



Circular map for RC213161



Western blot validation of overexpression lysate (Cat# [LY421294]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC215527] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ARSA protein (Cat# [TP313161]). The protein was produced from HEK293T cells transfected with ARSA cDNA clone (Cat# RC213161) using MegaTran 2.0 (Cat# [TT210002]).