OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC204319

ARSA (NM_000487) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARSA (NM_000487) 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:

>RC204319 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGGCACCGCGGTCCCTCCTCCTGGCCCTGGCTGCTGGCCTGGCCGTTGCCCGTCCGCCCAACATCG
TGCTGATCTTTGCCGACGACCTCGGCTATGGGGACCTGGGCTGCTATGGGCACCCCAGCTCTACCACTCC
CAACCTGGACCAGCTGGCGGCGGGAGGGCTGCGGTTCACAGACTTCTACGTGCCTGTGTCTCTGTGCACA
CCCTCTAGGGCCGCCCTCCTGACCGGCCGGCTCCCGGTTCGGATGGGCATGTACCCTGGCGTCCTGGTGC
CCAGCTCCCGGGGGGGCCTGCCCCTGGAGGAGGTGACCGTGGCCGAAGTCCTGGCTGCCCGAGGCTACCT
CACAGGAATGGCCGGCAAGTGGCACCTTGGGGTGGGGCCTGAGGGGGCCTTCCTGCCCCCCCATCAGGGC
TTCCATCGATTTCTAGGCATCCCGTACTCCCACGACCAGGGCCCCTGCCAGAACCTGACCTGCTTCCCGC
CGGCCACTCCTTGCGACGGTGGCTGTGACCAGGGCCTGGTCCCCATCCCACTGTTGGCCAACCTGTCCGT
GGAGGCGCAGCCCCCCTGGCTGCCCGGACTAGAGGCCCGCTACATGGCTTTCGCCCATGACCTCATGGCC
GACGCCCAGCGCCAGGATCGCCCCTTCTTCCTGTACTATGCCTCTCACCACACCCACTACCCTCAGTTCA
GTGGGCAGAGCTTTGCAGAGCGTTCAGGCCGCGGGCCATTTGGGGACTCCCTGATGGAGCTGGATGCAGC
TGTGGGGACCCTGATGACAGCCATAGGGGACCTGGGGCTGCTTGAAGAGACGCTGGTCATCTTCACTGCA
GACAATGGACCTGAGACCATGCGTATGTCCCGAGGCGGCTGCTCCGGTCTCTTGCGGTGTGGAAAGGGAA
CGACCTACGAGGGCGGTGTCCGAGAGCCTGCCTTGGCCTTCTGGCCAGGTCATATCGCTCCCGGCGTGAC
CCACGAGCTGGCCAGCTCCCTGGACCTGCTGCCTACCCTGGCAGCCCTGGCTGGGGCCCCACTGCCCAAT
GTCACCTTGGATGGCTTTGACCTCAGCCCCCTGCTGCTGGGCACAGGCAAGAGCCCTCGGCAGTCTCTCT
TCTTCTACCCGTCCTACCCAGACGAGGTCCGTGGGGTTTTTGCTGTGCGGAGTGGAAAGTACAAGGCTCA
CTTCTTCACCCAGGGCTCTGCCCACAGTGATACCACTGCAGACCCTGCCTGCCACGCCTCCAGCTCTCTG
ACTGCTCATGAGCCCCCGCTGCTCTATGACCTGTCCAAGGACCCTGGTGAGAACTACAACCTGCTGGGGG
GTGTGGCCGGGGCCACCCCAGAGGTGCTGCAAGCCCTGAAACAGCTTCAGCTGCTCAAGGCCCAGTTAGA
CGCAGCTGTGACCTTCGGCCCCAGCCAGGTGGCCCGGGGCGAGGACCCCGCCCTGCAGATCTGCTGTCAT
CCTGGCTGCACCCCCCGCCCAGCTTGCTGCCATTGCCCAGATCCCCATGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204319 protein sequence
Red=Cloning site Green=Tags(s)

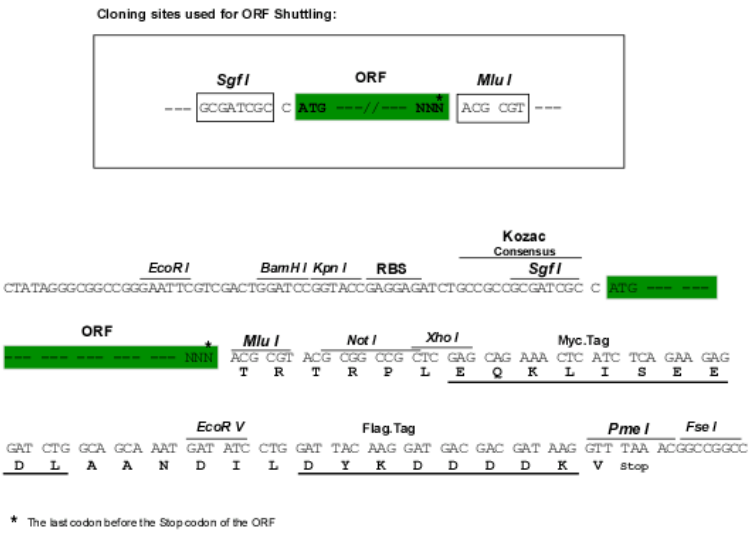
MGAPRSLLLALAAGLAVARPPNIVLIFADDLGYGDLGCYGHPSSTTPNLDQLAAGGLRFTDFYVPVSLCT
PSRAALLTGRLPVRMGMYPGVLVPSSRGGLPLEEVTVAEVLAARGYLTGMAGKWHLGVGPEGAFLPPHQG
FHRFLGIPYSHDQGPCQNLTCFPPATPCDGGCDQGLVPIPLLANLSVEAQPPWLPGLEARYMAFAHDLMA
DAQRQDRPFFLYYASHHTHYPQFSGQSFAERSGRGPFGDSLMELDAAVGTLMTAIGDLGLLEETLVIFTA
DNGPETMRMSRGGCSGLLRCGKGTTYEGGVREPALAFWPGHIAPGVTHELASSLDLLPTLAALAGAPLPN
VTLDGFDLSPLLLGTGKSPRQSLFFYPSYPDEVRGVFAVRSGKYKAHFFTQGSAHSDTTADPACHASSSL
TAHEPPLLYDLSKDPGENYNLLGGVAGATPEVLQALKQLQLLKAQLDAAVTFGPSQVARGEDPALQICCH
PGCTPRPACCHCPDPHA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6247_d09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000487

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_000487.6

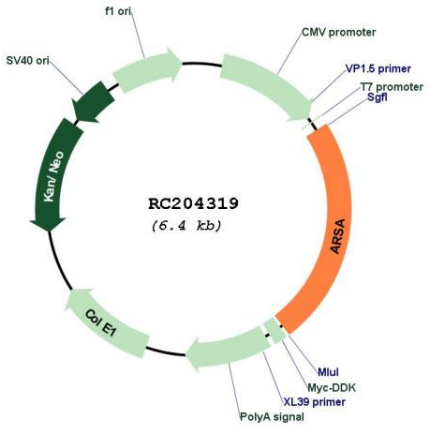
RefSeq Size: 4325 bp

RefSeq ORF: 1530 bp

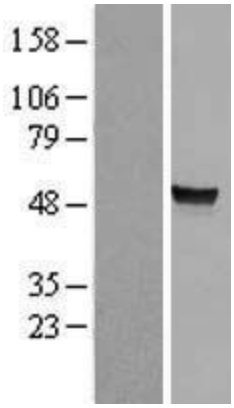
Locus ID: 410

UniProt ID:	P15289
Cytogenetics:	22q13.33
Domains:	Sulfatase
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]

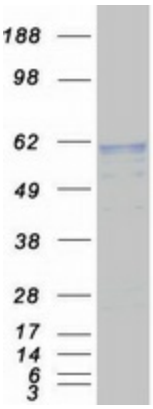
Product images:



Circular map for RC204319



Western blot validation of overexpression lysate (Cat# [LY421294]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected 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# [TP304319]). The protein was produced from HEK293T cells transfected with ARSA cDNA clone (Cat# RC204319) using MegaTran 2.0 (Cat# [TT210002]).