

Product datasheet for **RC215027**

ASAH2 (NM_019893) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ASAH2 (NM_019893) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ASAH2
Synonyms:	BCDase; HNAC1; LCDase; N-CDase; NCDase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC215027 representing NM_019893
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCAAACGCACCTTCTCTAACTTGGAGACATTCTGATTTTCTCCTTGTAAATGATGAGTGCCATCA
 CAGTGGCCCTTCTCAGCCTTTGTTTATACCAGTGGGACCATTGAAAACCACAAAGATTTAGGAGGCCA
 TTTTTTTCAACCACCCAAAGCCCTCCAGCCACCCAGGGCTCCACAGCCGCCAACGCTCCACAGCCACC
 CAGCATTCCACAGCCACCCAGAGCTCCACAGCCACTCAAACCTTCTCCAGTGCCTTTAACCCAGAGTCTC
 CTCTATTTCCAGAACTTCAGTGGTACCATATTGGTGTGGACGAGCTGACTGCACAGGACAAGTAGCAGA
 TATCAATTTGATGGGCTATGGCAAATCCGGCCAGAATGCACAGGGCATCCTACCAGGCTATACAGTCGT
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Protein Sequence: >RC215027 representing NM_019893
Red=Cloning site Green=Tags(s)

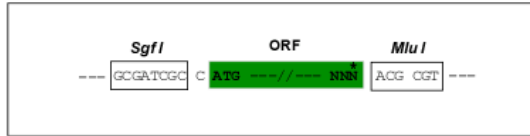
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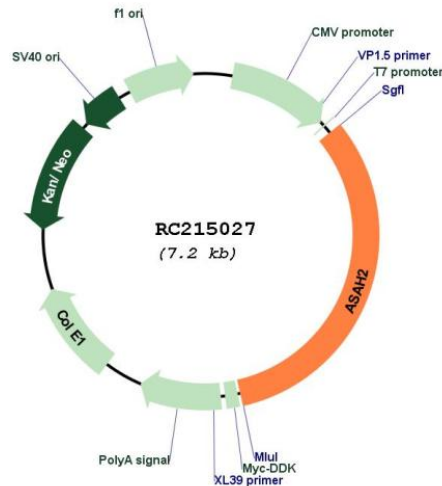
Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_019893

ORF Size: 2340 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_019893.2](#), [NP_063946.2](#)

RefSeq Size: 2289 bp

RefSeq ORF: 2343 bp

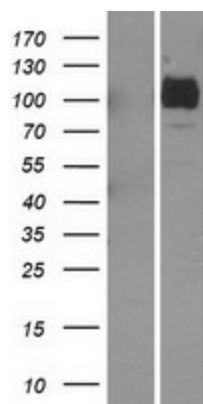
Locus ID: 56624

UniProt ID: [Q9NR71](#)

Cytogenetics: 10q11.23

Protein Families:	Transmembrane
Protein Pathways:	Metabolic pathways, Sphingolipid metabolism
MW:	83.1 kDa
Gene Summary:	Ceramidases (EC 3.5.1.23), such as ASAH2, catalyze hydrolysis of the N-acyl linkage of ceramide, a second messenger in a variety of cellular events, to produce sphingosine. Sphingosine exerts both mitogenic and apoptosis-inducing activities, and its phosphorylated form functions as an intra- and intercellular second messenger (see MIM 603730) (Mitsutake et al., 2001 [PubMed 11328816]).[supplied by OMIM, Mar 2008]

Product images:



Western blot validation of overexpression lysate (Cat# [LY412677]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215027 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).