

Product datasheet for **RC226789**

ASAH2 (NM_001143974) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ASAH2 (NM_001143974) 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:

>RC226789 representing NM_001143974
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCAAACGCACCTTCTCTAACTTGGAGACATTCTGATTTTCCTCCTTGTAAATGATGAGTGCCATCA
 CAGTGGCCCTTCTCAGCCTCTTGTATTACACCAGTGGGACCATTGAAAACCACAAAGATTTAGGAGGCCA
 TTTTTTTTCAACCACCCAAAGCCCTCCAGCCACCCAGGGCTCCACAGCTGCCCAACGCTCCACAGCCACC
 CAGCATTCCACAGCCACCCAGAGCTCCACAGCCACTCAAACCTTCTCCAGTGCCTTTAACCCAGAGTCTC
 CTCTATTTTCAAGACTTCCAGTGGTACCATTGGTGTGGACGAGCTGACTGCACAGGACAAGTAGCAGA
 TATCAATTTGATGGGCTATGGCAAATCCGGCCAGAATGCACAGGGCATCCTACCAGGCTATACAGTCGT
 GCCTTCATCATGGCAGAACCTGATGGGTCCAATCGAACAGTGTGTGTCAGCATCGACATAGGCATGGTAT
 CACAAAGGCTCAGGCTGGAGTCTGAACAGACTGCAGAGTAAATATGGCTCCCTGTACAGAAGAGATAA
 TGTTCATCCTGAGTGGCACTCACACTCATTCCAGGCTCCTGCAGGATATTTCCAGTATACCGTGTGTAATT
 GCCAGTGAAGGATTTAGCAATCAAACCTTTTCAGCAGATGGTCACTGGTATCTTGAAGAGCATTGACATAG
 CACACACAAATATGAAACCAGGCAAAATCTTCATCAATAAAGGAAATGTGGATGGTGTGCAGATCAACAG
 AAGTCCGTATTCTTACCTTCAAATCCGCAGTCAGAGAGAGCAAGGTATTCTTCAAATACAGACAAGGAA
 ATGATAGTTTTGAAAATGGTAGATTTGAATGGAGATGACTTGGGCCTTATCAGCTGGTTTGCCATCCACC
 CGGTCCAGCATGAACAACAGTAACCATCTTGAACAGTGAACAATGTGGGCTATGCATCTTACCTGCTTGA
 GCAAGAGAAGAACAAGGATATCTACCTGGACAGGGGCCATTTGTAGCAGCCTTTGCTTCATCAAACCTA
 GGAGATGTGTCCCCAACATTCTTGGACCAGTTGCATCAACACAGGAGAGTCTGTGATAACGCCAATA
 CACTTGTCCCATTGGTGGCCTAGCATGTGCATTGCTAAGGGACCTGGACAGGATATGTTTGACAGCAG
 ACAAAATATAGGACGGGCCATGTATCAGAGAGCAAAGTCAAAAACATGTAACCAGCATTGGGCTACAGT
 TTTGCAGCTGGCACTATTGATGGAGTTGGAGGCCCTCAATTTTACACAGGGGAAAACAGAAGGGGATCCAT
 TTTGGGACACCATTCCGGACCAGATCCTGGGAAAGCCATCTGAAGAAATTAAGAATGTCATAAACCAAAA
 GCCCATCCTTCTTACACCCGGAGAACTATCAAACCTCACCCCTGGCATCCAGACATTGTTGATGTTTACG
 ATTATTACCCTTGGGCTCTTGGCCATAACTGCCATCCCCGGGAGTTTACGACCATGTCTGGACGAAGAC
 TTCGAGAGGCAGTTCAAGCAGAATTTGCATCTCATGGGATGCAGAACATGACTGTTGTTATTTCCAGGCT
 ATGCAACGTCTATACACATTACATTACCCTTATGAAGAATACCAGGCTCAGCGATATGAGGCAGCATCG
 ACAATTTATGGACCGCACACATTATCTGCTTACATTAGCTCTTTCAGAACTTGTCTAAGGCTATTGCTA
 CGGACACGGTAGCCAACCTGAGCAGAGTCCAGAACCTCCCTTTTCAAACAATTAATAGTTCCATTAAT
 TCCTAGTATTGTGGATAGAGCACAAAAGGCAGAACTTTCGGGGATGTCCTGCAGCCAGCAAAACCTGAA
 TACAGAGTGGGGGAAGTTGCTGAAGTTATTTGTAGGTGCTAACCCGAAGAATTCAGTACAAAACCAGA
 CCCATCAGACCTTCTCACTGTGGAGAAATATGAGGCTACTTCAACATCGTGGCAGATAGTGTGTAATGA
 TGCTCTCTGGGAGACTCGTTTTTATTGGCACAAGGACTCCTGGGTCTGAGTAATGCAACAGTGGAAATGG
 CATATTCAGACACTGCCAGCCTGGAATCTACAGAATAAGATATTTTGGACACAATCGGAAGCAGGACA
 TTCTGAAGCCTGCTGTCATACTTTCATTTGAAGGCACTTCCCCGGCTTTTGAAGTTGTAAGTATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226789 representing NM_001143974
 Red=Cloning site Green=Tags(s)

MAKRTFSNLETFLIFLLVMSAITVALLSLLFITSGTIENHKDLGGHFFSTTQSPPATQGSTAAQRSTAT
 QHSTATQSSTATQTSPVPLTPESPLFQNFSGYHIGVGRADCTGQVADINLMGYGKSGQNAQGILTRLYSR
 AFIMAEPDGSNRTVFVSDIGMVSQRLRLEVLNRLQSKYGSLYRRDNVILSGTHTHSGPAGYFQYTVFVI
 ASEGFSNQTFQHMVTGILKSIDIAHTNMKPGKIFINKGNVDGVQINRSPYSYLQNPQSERARYSSNTDKE
 MIVLKMVDLNGDDLGLISWFAIHPVSMNNSNHLVNSDNVGYASYLLEQEKNKGYLPGQGPVAAFASSNL
 GDVSPNILGPRCINTGESCDNANSTCPIGGPSMCIKGPQDMFDSTQIIGRAMYQRAKSKTCKPALGYS
 FAAGTIDVGGGLNFTQGKTEGDPFWDTIRDQILGKPSEEIKECHKPKPILLHTGELSKPHPWHPDIVDVQ
 IITLGLSLAITAIPGEFTTMSGRRLREAVQAEFASHGMQNMTVVISGLCNVYTHYITTYEEYQAQRYEAS
 TIYGPHTLSAYIQLFRNLAKAIATDTVANLSRGPEPPFFKQLIVPLIPSIVDRAPKGRTFGDVLPAPKE
 YRVGEVAEVI FVGANPKNSVQNQTHQFTLVEKYEATSTSWQIVCNDASWETRFYWHKGLLGLSNATVEV
 HIPDTAQPGIYIRYFGHNRKQDILKPAVILSFEGTSPAFAFEVVTI

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2111_h04.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

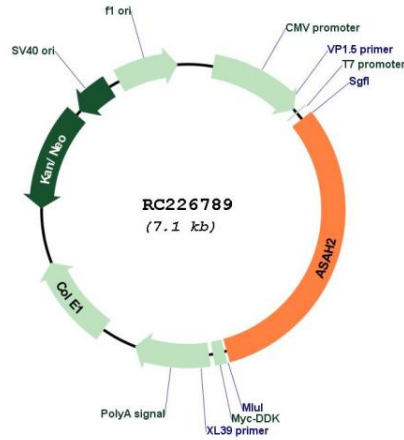
ACCN: NM_001143974

ORF Size: 2235 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001143974.2
RefSeq Size:	2327 bp
RefSeq ORF:	2238 bp
Locus ID:	56624
UniProt ID:	Q9NR71
Cytogenetics:	10q11.23
Protein Families:	Transmembrane
Protein Pathways:	Metabolic pathways, Sphingolipid metabolism
MW:	82.2 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:


Circular map for RC226789