

## Product datasheet for **SC326211**

### ASAH2 (NM\_001143974) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ASAH2 (NM_001143974) Human Untagged Clone
Tag:	Tag Free
Symbol:	ASAH2
Synonyms:	BCDase; HNAC1; LCDase; N-CDase; NCDase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



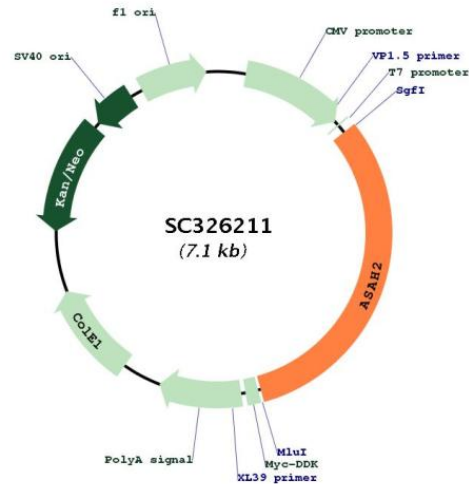
[View online »](#)

**Fully Sequenced ORF:** >SC326211 representing NM\_001143974.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

```

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCACGATCGCC
ATGGCCAAACGCACCTTCTCTAACTGGAGACATTCTGATTTTCTCTTGTAAATGATGAGTGCCATC
ACAGTGGCCCTTCTCAGCCTCTTGTATACACAGTGGGACCATTGAAAACCACAAGATTTAGGAGGC
CATTTTTTTTCAACCACCCAAAGCCCTCCAGCCACCCAGGGCTCCACAGCTGCCAACGCTCCACAGCC
ACCCAGCATTCCACAGCCACCCAGAGCTCCACAGCCACTCAAACCTTCTCCAGTGCCTTTAACCCAGAG
TCTCTCTATTTCAGAACTTCAGTGGCTACCATAATTGGTGTGGACGAGCTGACTGCACAGGACAAGTA
GCAGATATCAATTTGATGGGCTATGGCAAATCCGGCCAGAATGCACAGGGCATCTCACCAGGCTATAC
AGTCGTGCCTTCATCATGGCAGAACCTGATGGTCCAATCGAACAGTGTGTGTCAGCATCGACATAGGC
ATGGTATCACAAAGGCTCAGGCTGGAGGCTCTGAACAGACTGCAGAGTAAATATGGCTCCCTGTACAGA
AGAGATAATGTCATCCTGAGTGGCACTCACACTATTAGGCTCCTGCAGGATATTTCCAGTATACCGTG
TTTGAATTGCCAGTGAAGGATTTAGCAATCAAACCTTTTTCAGCACATGGTCACTGGTATCTTGAAGAGC
ATTGACATAGCACACAAAATATGAAACCAGGCAAAATCTTCATCAATAAAGGAAATGTGGATGGGTG
CAGATCAACAGAAGTCCGTATTCTTACCTTCAAATCCGCAGTCAGAGAGAGCAAGGTATTCTTCAAAT
ACAGACAAGGAAATGATAGTTTTGAAAATGGTAGATTTGAATGGAGATGACTTGGGCCTTATCAGCTGG
TTTGCCATCCACCCGGTCCAGCATGAACAACAGTAACCATCTTGTAAACAGTGACAATGTGGGCTATGCA
TCTTACCTGCTTGAGCAAGAGAAGAACAAGGATATCTACCTGGACAGGGGCCATTTGTAGCAGCCTTT
GCTTCATCAAACCTAGGAGATGTGTCCCAACATTCTGGACCAGTTGCATCAACACAGGAGAGTCC
TGTGATAACGCCAATAGCACTTGTCCCATTGGTGGGCTAGCATGTGCATTGCTAAGGGACCTGGACAG
GATATGTTTGACAGCACAAAATTATAGGACGGGCCATGTATCAGAGAGCAAAGTCAAAAACATGTAAA
CCAGCATTGGGCTACAGTTTTGCAGCTGGCACTATTGATGGAGTTGGAGGCCTCAATTTTACACAGGGG
AAAACAGAAGGGGATCCATTTTGGGACACCATTGGGACCAGATCCTGGGAAAGCCATCTGAAGAAATT
AAAGAATGTCATAAACCAAGCCATCTTCTTACACCCGGAGAATATCAAACCTCACCCCTGGCAT
CCAGACATTGTTGATGTTGAGATTATTACCCTTGGGCTCTTGGCCATAACTGCCATCCCCGGGGAGTTT
ACGACCATGTCTGGACGAAGACTTCGAGAGGCAGTTCAAGCAGAATTTGCATCTCATGGGATGCAGAAC
ATGACTGTTGTTATTTAGGCTCTATGCAACGTCTATACACATTACATTACCATTATGAAGAATACCAG
GCTCAGCGATATGAGGCAGCATCGACAATTTATGGACCGCACACATTATCTGCTTACATTAGCTCTTC
AGAAACCTTGCTAAGGCTATTGCTACGGACACGGTAGCCAACCTGAGCAGAGGTCCAGAACCTCCCTTT
TTCAAACAATTAATAGTTCCATTAATTCCTAGTATTGTGGATAGAGCACAAAAGGCAGAACTTTGGG
GATGTCCTGCAGCCAGCAAAACCTGAATACAGAGTGGGGGAAGTTGCTGAAGTTATATTTGTAGGTGCT
AACCCGAAGAATTCAGTACAAAACCAGACCCATCAGACCTTCTCACTGTGGAGAAATATGAGGCTACT
TCAACATCGTGGCAGATAGTGTGAATGATGCCTCCTGGGAGACTCGTTTTTATTGGCACAAGGGACTC
CTGGGTCTGAGTAATGCAACAGTGGAAATGGCATATTCAGACACTGCCAGCCTGGAATCTACAGAATA
AGATATTTGGACACAATCGGAAGCAGGACATTCTGAAGCCTGCTGTACTTTTCAATTTGAAGGCAT
TCCCCGGCTTTGAAGTTGTAACCTATTAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
```

**Restriction Sites:** SgfI-MluI

**Plasmid Map:**


**ACCN:** NM\_001143974

**Insert Size:** 2238 bp

**OTI Disclaimer:** 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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:	<u>NM_001143974.1</u>
RefSeq Size:	2327 bp
RefSeq ORF:	2238 bp
Locus ID:	56624
UniProt ID:	<u>Q9NR71</u>
Cytogenetics:	10q11.23
Protein Families:	Transmembrane
Protein Pathways:	Metabolic pathways, Sphingolipid metabolism
MW:	81.7 kDa
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the internal coding region, compared to variant 1. The resulting isoform (b) is shorter, compared to isoform a.</p> <p>Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>