

Product datasheet for RC212434

ASAH1 (NM_004315) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ASAH1 (NM_004315) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ASAH1
Synonyms:	AC; ACDase; ASAH; PHP; PHP32; SMAPME
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212434 representing NM_004315 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAACTGCTGCATCGGGCTGGGAGAGAAAGCTCGCGGGTCCCACGGGCCTCTACCCAAGTCTCAGCGCGCTTTTCACCGAGGCCCTCAATTCTGGGATTTGGCAGCTTTGCTGTGAAAGCCCAATGGACAGAGGACTGCAGAAAATCAACCTATCCTCCTTCAGGACCAACGTACAGAGGTGCAGTTCATGGTACACCATAAATCTTGACTTACCACCCTACAAAAGATGGCATGAATTGATGCTTGACAAGGCACCAATGCTAAAGGTTATAGTGAATCTCTGAAGAATATGATAAAACATTGTCGCAAGTGGAAAAGTTATGCAGGTGGTGGATGAAAAATTGCCTGGCCTACTTGGCAACTTTCCTGGCCCTTTTGAAGAGGAAAATGAAGGGTATTGCCGCTGTTACTGATATACCTTTAGGAGAGATTATTTCAATCAATTTTTTATGAATTTTACCATTTGACTTCAATAGTAGCAGAAGACAAAAAGGTCATCTAATACATGGGAGAAAACATGGATTTTGGAGTATTTCTTGGGTGGAACATAAATAATGATACCTGGGTCATAACTGAGCAACTAAAACCTTTAACAGTGAATTTGGATTTCCAAAGAAACACAAAACCTGTCTTCAAGGCTTCAAGCTTTGCTGGCTATGTGGGCATGTTAACAGGATTCAAACCAGGACTGTTTCAGTCTTACACTGAATGAACGTTTCAGTATAAATGGTGGTTATCTGGGTATCTAGAATGGATTCTGGGAAAGAAAGATGCCATGTGGATAGGGTTCCTCACTAGAACAGTCTGGAAAATAGCACAAAGTTATGAAAGAACCAAGAATTTATTGACCAAGACCAAGATATTGGCCCGCCACTTTATCCTGGGAGGCAACCACTCTGGGGAAGGTTGTGATTACACGAGACAGAAAAGGAATCATTGGATGTATGAACCTCGATGCTAAGCAGGGTAGATGGTATGTGGTACAAACAAATATGACCCTTGGAAAACATCCCTTCTCCTTGATGATCGCAGAACGCTGCAAAGATGTGTCTGAACCGCACCAGCCAAGAGAATATCTCATTGAAACCATGTATGATGTCCGTCAACAAAACCTGTCTCAACAAGCTGACCGTATACACAACCTTGATAGATGTTACCAAAGGTCAATTGAAAACCTTACCTGCGGGACTGCCTGACCCTTGATAGGTTGG

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



[View online >](#)

Protein Sequence: >RC212434 representing NM_004315
Red=Cloning site Green=Tags(s)

MNCCIGLGEKARGSHRASYPSSLALFTEASILGFGSFAVKAQWTEDCRKSTYPPSGPTYRGAVPWYTINL
 DLPPYKRWHELMMLDKAPMLKVIIVNSLKNMINTFVPSGKVMQVVDEKLPGLLGNFPGPFEEEMKGIAAVTD
 IPLGEIISFNIFYELFTICTSIVAEDKKGHLIHGRNMDFGVFLGWNINNDTWVITEQLKPLTVNLDQFN
 NKTVFKASSFAGYVVGMLTGFKPGLFSLTLNERFSINGGYLGILEWILGKKDAMWIGFLTRTVLENSTSYE
 EAKNLLTKTKILAPAYFILGGNQSGEGCVITRDRKESLDVYELDAKQGRWYVYVQTYNDRWHPFFLDDRR
 TPAKMCLNRTSQENISFETMYDVLSTKPVLNKLTVYTTLIDVTKGQFETYLRDCPDPCIGW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6119_e03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_004315

ORF Size: 1233 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_004315.3](#)

RefSeq Size: 2503 bp

RefSeq ORF: 1236 bp

Locus ID: 427

UniProt ID: [Q13510](#)

Cytogenetics: 8p22

Domains: CBAH

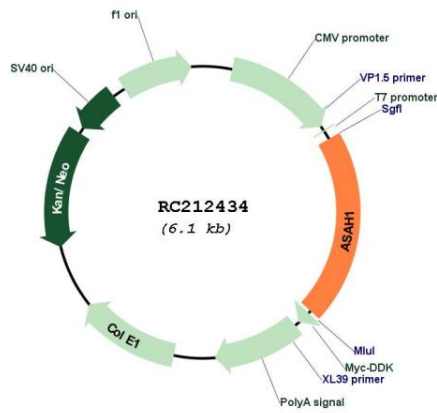
Protein Families: Druggable Genome

Protein Pathways: Lysosome, Metabolic pathways, Sphingolipid metabolism

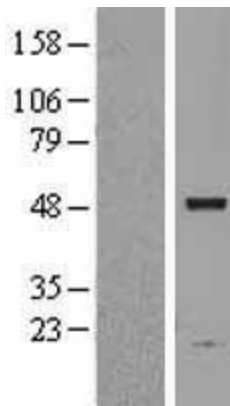
MW: 46.3 kDa

Gene Summary: This gene encodes a member of the acid ceramidase family of proteins. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed. Processing of this preproprotein generates alpha and beta subunits that heterodimerize to form the mature lysosomal enzyme, which catalyzes the degradation of ceramide into sphingosine and free fatty acid. This enzyme is overexpressed in multiple human cancers and may play a role in cancer progression. Mutations in this gene are associated with the lysosomal storage disorder, Farber lipogranulomatosis, and a neuromuscular disorder, spinal muscular atrophy with progressive myoclonic epilepsy. [provided by RefSeq, Oct 2015]

Product images:



Circular map for RC212434



Western blot validation of overexpression lysate (Cat# [LY401373]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212434 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ASAH1 protein (Cat# [TP312434]). The protein was produced from HEK293T cells transfected with ASAH1 cDNA clone (Cat# RC212434) using MegaTran 2.0 (Cat# [TT210002]).