

Product datasheet for MR202750

Asah3l (BC059819) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Asah3l (BC059819) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Asah3l

Synonyms: CRG-L1, Acer2, maCER2

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >MR202750 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGCGCCCCGCACTGGTGGACCACCTGCGGGCTGGCAGTTCGGAGGTGGATTGGTGCGAGGACAACT
ACACTATCGTGCCTGCCATTGCCGAGTTCTACAACACGATCAGCAACGTCTTGTTTTTCATTTTACCTCC
CATCTGCATGTGCTTGTTCCGCCAGTACGCAACGTGCTTCAACAGCGGCATCTACTTAATATGGACGCTC
CTAGTTGTAGTGGGGATTGGATCTGTCTACTTCCATGCAACGCTGAGTTTCCTGGGTCAGATGCTTGATG
AACTTGCCATTCTGTGGGTTCTGATGTGTGCTTTGGCCATGTGGTTTCCCAGGAGGTATTTACCAAAGAT
CTTTCGGAATGACAGGTGTGACAATGTGCGTGTTTTAAGCTGGGCCTCTTCTCTGGCCTCTGGTGGACT
CTGGCTCTCTTCTGCTGGATCAGCGACCAAGCCTTCTGTGAGCTGCTCTCCTCCTTTCACTTCCCCTACC
TGCACTGTGTGTGGCATATTCTCATCTGCCTTGCTTCGTACCTTGGCCCAGCGAGAAATGGGCTTTTATT
GGTGTCCCTTATGTGTCCCTTCTTGTGCCCACAAGAAGTCCCCAGCTCAAGATCACG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR202750 protein sequence

Red=Cloning site Green=Tags(s)

MGAPHWWDHLRAGSSEVDWCEDNYTIVPAIAEFYNTISNVLFFILPPICMCLFRQYATCFNSGIYLIWTL LVVVGIGSVYFHATLSFLGQMLDELAILWVLMCALAMWFPRRYLPKIFRNDRCDNVRVFKLGLFSGLWWT LALFCWISDQAFCELLSSFHFPYLHCVWHILICLASYLGCVCFAYFDAASEIPEQGPVIRFWPSEKWAFI GVPYVSLLCAHKKSPVKIT

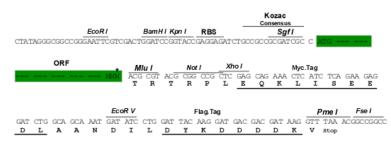
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: BC059819

ORF Size: 687 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: <u>BC059819</u>, <u>AAH59819</u>

RefSeq Size: 4078 bp
RefSeq ORF: 689 bp
Locus ID: 230379
Cytogenetics: 4 C4

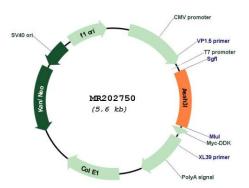
MW: 26.5 kDa

Gene Summary: Golgi ceramidase that catalyzes the hydrolysis of ceramides into sphingoid bases like

sphingosine and free fatty acids at alkaline pH (PubMed:29401619). Ceramides, sphingosine, and its phosphorylated form sphingosine-1-phosphate are bioactive lipids that mediate cellular signaling pathways regulating several biological processes including cell proliferation, apoptosis and differentiation (PubMed:29401619). Has a better catalytic efficiency towards unsaturated long-chain ceramides, including C18:1-, C20:1- and C24:1-ceramides (By similarity) (PubMed:29401619). Saturated long-chain ceramides and unsaturated very long-chain ceramides are also good substrates, whereas saturated very long-chain ceramides and short-chain ceramides are poor substrates. Also hydrolyzes dihydroceramides to produce dihydrosphingosine (By similarity). It is the ceramidase that controls the levels of circulating sphingosine-1-phosphate and dihydrosphingosine-1-phosphate in plasma through their production by hematopoietic cells (PubMed:29401619). Regulates cell proliferation, autophagy and apoptosis by the production of sphingosine and sphingosine-1-phosphate. As part of a p53/TP53-dependent pathway, promotes for instance autophagy and apoptosis in response to DNA damage. Through the production of sphingosine, may also regulate the function of the Golgi complex and regulate the glycosylation of proteins (By similarity).



Product images:



Circular map for MR202750