

Product datasheet for **MG218633**

Cerk (NM_145475) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cerk (NM_145475) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cerk
Synonyms:	A1848610; D330016D08Rik; mKIAA1646
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG218633 representing NM_145475
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGGCAATGGGGGCGCGGAGCCGCTGCACTCCGTGCTGTGGGTGAAACGGCGACGCTGTGCCGTCA
 GCCTGGAGCCCGCGGGCTCTGCTACGCTGGTGGCGGAGCCCGAGCCGGGCCCTCCGCGCCGGGTGC
 CGATGCCCGCTCGGACTGCTGTCGAGATCATCGCTGTTGAGGAAAAAGACGACTGCGAGAAAACAGCC
 TCCAGTGGCCGATGGCATAAAATGGAAAATCCGTTTCGATTACAGTCCACCGTGTGAAGCGAGTACGAC
 ATCACCCTGGAAGTGGGACGGGTGACCTTCTGGAGCGCCGACGAGCAGCTGTGTACCTGTGGCTGCA
 GACCTCCGTGGGCTGCTGGAGAGCCTGACTTCAAGACCGAAGCACTTGTGGTATTATCAACCCCTTC
 GGAGGAAAGGTCAGGGCAAGCGCATCTATGAAAAACAGTGGCGCTCTGTTTACCTTGGCTTCCATCA
 CTACGGAGATCATATTACAGAGCATGCCAACCAAGCAAGGAGACTTTATACGAGATCAACACAGACAG
 CTATGATGGCATCGTGTGCGTAGGTGGGACGGCATGTTACGCGAGGTGCTGCATGGGGTATTGGGAGG
 ACGCAGCAGAGCCGCTGGTATCGACCCCAATCACCCCGAGCCGCTGCTGGTCCCAGTACCCTCAGGATCG
 GCATCATACCCGACGGGTCCACAGATTGTGTGTACTCAACAGTGGGCACAAAACGACGACGAGACATC
 GGCTTTGCACATCATTATTGGGACTCACTGGCAATAGACGTGTCCTCTGTGCACTACCATAACACGCTG
 CTGCGGTAACCGTTTCTCTGCTGGGCTACGGTTTCTACGGGACTTAATCAAGGACAGTAAAAGAAAAC
 GGTGGATGGGCCCTCGTCCGGTATGATTTCTCAGGGTTGAAGACCTTTCTCTCATCAGTACTATGAAGG
 GACTGTCTTCTCCAGCACAGCACACGGTGGGATCTCCACGGGACAATAAACCTGCCGGGCTGGG
 TGCTTCGTGTGCAGGCAGAGCAAGCAACAGCTGGAAGAAGAAGAGAAGAAAGCCCTGTATGGCCTGGAGA
 ACGCCGAGGAAATGGAAGAGTGGCAAGTACATGTGGGAAGTTCCTGGCCATCAATGCCACCAACATGTC
 CTGTGCTTGTCTCGGAGCCCTGGGGCCTGTCCCATTTGCCCATCTGGGAGATGGGTCTTCTGACCTC
 ATCCTTATCCGGAAGTGTCCAGGTTCAACTTCTGAGATTCTCATCCGGCACACGAACAGGAGGACC
 AGTTCGACTTCACTTTGTTGAAGTTTATCGAGTCAAGAAATCCACTTACGTCGAAGCACGTGGAAGA
 CGAGGACAATGACTCGAAGGAACAAGAGAAGCAGAAGTTGGGAAGATCTGCAAGGACAGACCCTTTGC
 ACTTGCTCAGCCTCCAGAAGCTCCTGGAAGTGCATGGCGAAGTGCATGCACAGCCCGCCATTGAGGTCA
 GGGTCCACTGCCAGCTGGTGGCCTCTTGTCTCGGGGAATCGAGGAAGAGTCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG218633 representing NM_145475
 Red=Cloning site Green=Tags(s)

MGAMGAAEPLHSVLWVKRRRCVLSLEPARALLRWWRSPEPGPSAPGADARSVLVSEIIAVEEKDDCEKHA
 SSGRWHKMENPFAFTVHRVKRVRHHRWKWARVTFWSADEQLCHLWLQTLRGLLESLTSRPKHLLVFINPF
 GKGQKRIYEKTVAPLFTLASITTEIIITEHANQAKETLYEINTDSYDGI VCVGGDMFSEVLHGVIGR
 TQQSAGIDPNHPRAVLVPSTLRIGIIPAGSTDCVCYSTVGTNDAETSALHIIIGDSLAI DVSSVHYHNTL
 LRYSVSLLGYGFYDGLIKDSEKKRWMGLVRYDFSGLKTFLSHQYYEGTLSFLPAQHTVGS PRDNKPCRAG
 CFVCRQSKQQL EEEEEKALYGLENAEEMEQVTCGKFLAINATNMSCACPRSPGGLSPFAHLGDGSSDL
 ILIRKCSRNFNLRFLIRHTNQEDQDFTFVEVYRVKFFHFTSKHVEDEDNDSKEQEKQKFKICKDRPSC
 TCSASRSSWNCDEVMHSPAIEVRVHCQLVRLFARGIEEES

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_145475

ORF Size: 1593 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_145475.4](#), [NP_663450.3](#)

RefSeq Size: 4562 bp

RefSeq ORF: 1596 bp

Locus ID: 223753

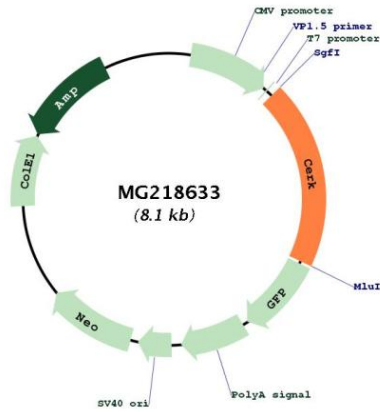
UniProt ID: [Q8K4Q7](#)

Cytogenetics: 15 E2

Gene Summary:

Catalyzes specifically the phosphorylation of ceramide to form ceramide 1-phosphate (PubMed:16269826). Acts efficiently on natural and analog ceramides (C6, C8, C16 ceramides, and C8-dihydroceramide), to a lesser extent on C2-ceramide and C6-dihydroceramide, but not on other lipids, such as various sphingosines (PubMed:16269826). Shows a greater preference for D-erythro isomer of ceramides (By similarity). Binds phosphoinositides (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG218633