

Product datasheet for **RG213995**

CERK (NM_022766) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CERK (NM_022766) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CERK
Synonyms:	dA59H18.2; dA59H18.3; hCERK; LK4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG213995 representing NM_022766
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGGCGACGGGGGCGCGGAGCCGCTGCAATCCGTGCTGTGGGTGAAGCAGCAGCGCTGCGCCGTGA
 GCCTGGAGCCCGCGGGCTCTGCTGCGCTGGTGGCGGAGCCCGGGCCCGGAGCCGCGCCCGCGCGC
 GGATGCCTGCTCTGTGCCTGTATCTGAGATCATCGCCGTTGAGGAAACAGACGTTACGCGGAAACATCAA
 GGCAGTGGAAAATGGCAGAAAATGGAAAAGCCTTACGCTTTTACAGTTCACTGTGTAAAGAGAGCAGCAGC
 GGCACCGCTGGAAGTGGGCGCAGGTGACTTTCTGGTGTCCAGAGGAGCAGCTGTGTCACTTGTGGCTGCA
 GACCCTGCGGGAGATGCTGGAGAAGCTGACGTCCAGACCAAGCATTACTGGTATTTATCAACCCGTTT
 GGAGGAAAAGGACAAGGCAAGCGGATATATGAAAGAAAAGTGGCACCAGTGTACCTTAGCCTCCATCA
 CCACTGACATCATCGTTACTGAACATGCTAATCAGGCCAAGGAGACTCTGTATGAGATTAACATAGACAA
 ATACGACGGCATCGTCTGTGTGCGCGGAGATGGTATGTTACGCGAGGTGCTGCACGGTCTGATTGGGAGG
 ACGCAGAGGAGCGCCGGGTCGACCAGAACCACCCCGGGCTGTGCTGGTCCCAGTAGCCTCCGGATTG
 GAATCATTCGCCGAGGGTCAACGGACTGCGTGTGTTACTCCACCGTGGGACCAGCGACGAGAAACCTC
 GGCGCTGCATATCGTTGTTGGGACTCGCTGGCCATGGATGTGTCCTCAGTCCACCACAACAGCACACTC
 TTCGCTACTCCGTGTCCTGCTGGGCTACGGCTTCTACGGGGACATCATCAAGGACAGTGAAGAAGAAAC
 GGTGGTTGGGTCTTGCCAGATACGACTTTTTCAGGTTTAAAGACCTTCTCTCCACCAGTGTATGAAGG
 GACAGTGTCTTCTCCTGCACAACACCGTGGGATCTCAAGGGATAGGAAGCCCTGCCGGGACGGA
 TGCTTTGTTTGCAGGCAAAGCAAGCAGCAGCTGGAGGAGGAGCAGAAGAAAGCACTGTATGGTTTGAAG
 CTGCGGAGGACGTGGAGGAGTGGCAAGTCTGTGGAAGTTTCTGGCCATCAATGCCACAACATGTC
 CTGTGCTTGTGCGCGGAGCCCGGGGCTCTCCCGGGCTGCCACTTGGGAGACGGGTCTTCTGACCTC
 ATCCTCATCCGGAATGCTCCAGTTCAATTTTCTGAGATTTCTCATCAGGCACCAACCAGCAGGACC
 AGTTTGACTTCACTTTTGTGAAGTTTATCGCGTCAAGAAATTCAGTTTACGTGAAGCACATGGAGGA
 TGAGGACAGCAGCTCAAGGAGGGGGGAAGAAGCGCTTGGGCACATTTGCAGCAGCCACCCCTCTGCG
 TGCTGCACCGTCTCCAACAGCTCCTGGAAGTGCAGCGGGAGGTCTGCACAGCCCTGCCATCGAGGTCA
 GAGTCCACTGCCAGCTGGTTCGACTCTTGCACAGGAATTGAAGAGAATCCGAAGCCAGACTCACACAG
 C

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG213995 representing NM_022766
 Red=Cloning site Green=Tags(s)

MGATGAAEPLQSVLWVKQQRCAVSLPARALLRWWRSPGPGAGAPGADACSVPVSEIIAVEETDVHGKHQ
 GSGKWQKMEKPYAFTVHCVKRARRHRWKAQVTFWCPEEQLCHLWLQTLREMLEKLTSRPKHLLVFINPF
 GGKQGKRIYERKVAFLFTLASITTDIIIVTEHANQAKETLYEINIDKYDGI VCVGGDGMFSEVLHGLIGR
 TQRSAGVDQNHPRAVLVPSSLRIGIIPAGSTDCVCYSTVGTSDAETSALHIVVGDSDLAMDVSSVHHNSTL
 LRYSVSLLGYGFYGDIIKDSEKKRWLGLARYDFSGLKTFLLSHHCYEGTVSFLPAQHTVGSPPRDRKPCRAG
 CFVCRQSKQQLLEEEQKALYGLEAAEDVEEWQVCGKFLAINATNMSCACRRSPRGLSPAHLGDGSSDL
 ILIRKCSRNFNLRFLIRHTNQDQDFDFTFVEVYRVKFKQFTSKHMEDESDLKEGGKRFGHICSSHPSC
 CCTVSNSSWNCDEVLHSPAIEVRVHCQLVRLFARGIEENPKPDSHS

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_022766

ORF Size: 1611 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 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

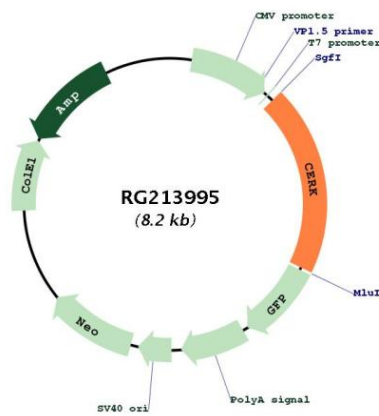
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_022766.6](#)
RefSeq Size: 4445 bp
RefSeq ORF: 1614 bp
Locus ID: 64781
UniProt ID: [Q8TCT0](#)
Cytogenetics: 22q13.31
Domains: DAGKc
Protein Families: Druggable Genome
Protein Pathways: Metabolic pathways, Sphingolipid metabolism
Gene Summary: CERK converts ceramide to ceramide 1-phosphate (C1P), a sphingolipid metabolite. Both CERK and C1P have been implicated in various cellular processes, including proliferation, apoptosis, phagocytosis, and inflammation (Kim et al., 2006 [PubMed 16488390]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RG213995