

Product datasheet for **RC219747**

Choline kinase alpha (CHKA) (NM_001277) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Choline kinase alpha (CHKA) (NM_001277) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Choline kinase alpha
Synonyms:	CHK; CK; CKI; EK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC219747 representing NM_001277
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAACCAAAATCTGCACCGGGGCGAGGCGGAGCCCTCGCCGCTCGGGCTGCTGCTGAGCTGCGGTA
 GCGGCAGCGCGGCCCGCGCGCCGGCGTGGGGCAGCAGCGCGACGCCAGCGACCTCGAGTCCAAGCA
 GCTGGGGCGGCAACAGCCGCGCTCGCGCTGCCCCCTCCGCCGCGCTGCCGCTGCCGCTGCCGCTGCC
 CAGCCCCCGCGCGCAGCCGCCCGCAGACGAGCAGCCGGAGCCCGGACGCGGCGCAGGGCCTATCTGT
 GGTGCAAGGAGTTCCTGCCCGCGCCTGGCGGGGCTCCGCGAGGACGAGTTCACATCAGTGTCTCAG
 AGGCGGCCTTAGCAACATGCTGTTCCAGTGTCCCTACCTGACACCACAGCCACCCTTGGTATGAGCCT
 CGGAAAGTCTCTCGGGTGTATGGAGCGATTTGCAGATGAGTCTGTAATAAAGAGGGATCCGAAC
 AAGCTCAGAAAGAAAATGAATTTCAAGGGGCTGAGGCCATGGTCTGGAGAGCGTTATGTTGCCATTCT
 CGCAGAGAGGTCACTTGGCCAAAACCTATGGCATCTTCCCAAGGCCGACTGGAGCAGTTCATCCCG
 AGCCGGCGATTAGATACTGAAGAATTAAGTTTGCCAGATATTTCTGCAGAAATCGCCGAGAAAATGGCTA
 CATTTCATGGTATGAAAATGCCATTCAATAAGGAACAAAATGGCTTTTTGGCACAAATGAAAAGTATCT
 AAAGGAAGTGTGAGAATTAATTTACTGAGGAATCCAGAATAAAAAGCTCCACAAATTGCTCAGTTAC
 AATCTGCCCTTGGAACTGAAAACCTGAGATCATTGCTTGAATCTACTCCATCTCCAGTTGTATTTTGT
 ATAATGACTGTCAAGAAGTAATATCTTGTGTGGAAGGCCGAGAGAATTTGAAAACAGAACTGAT
 GCTCATTGATTTGAATACAGCAGTTACAATTACAGGGGATTGACATTGGAAATCACTTCTGTGAGTGG
 ATGTATGATTATAGCTATGAAAATACCCTTTTTTCAGAGCAAACATCCGGAAGTATCCCACCAAGAAAC
 AACAGTCCATTTTATTTCCAGTTACTTGCCTGCATTCCAAAATGACTTTGAAAACCTCAGTACTGAAGA
 AAAATCCATTATAAAGAAGAAAATGTTGCTTGAAGTTAATAGGTTTGCCCTTGCATCTCATTTCTCTGG
 GGACTGTGGTCCATTGTACAAGCCAAGATTTTCATCTATTGAATTTGGGTACATGGACTACGCCAAGCAA
 GGTTTGTGCCTATTTCCACCAGAAGAGGAAGCTTGGGGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219747 representing NM_001277
 Red=Cloning site Green=Tags(s)

MKTKFCTGGEAEPSPLGLLLSCGSGSAAPAPGVGQQRDAASDLESKQLGGQQPPLALPPPPPLPLPLPLP
 QPPPPQPPADEQPEPRRRRAYLWCKEFLPGAWRGLREDEFHISVIRGGLSNMLFQCSLPDATTALGDEP
 RKVLLRLYLGAAILQMRSCNKEGSEQAQKENEFGAEAMVLESVMFAILAERSLGPPLYGIFPQGRLEQFIP
 SRRLDTEELSLPDISAEIAEKMATFHGMKMPFNKEPKWLFGTMEKYLKEVLRIFTEESRIKHLKLLSY
 NLPLELENLRSLLSTSPVVFCHNDCEGNILLLEGRENSKQKMLIDFEYSSYNRFGDIGNHFCW
 MYDYSYEKYPFFRANIRKYPTKQQLHFISSYLPAFQNDNFENLSTEEKSIIKEEMLLEVNRFALASHFLW
 GLWSIVQAKISSIEFGYMDYAQARFDAYFHQKRKLV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3484_d02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001277

ORF Size: 1371 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_001277.3](#)

RefSeq Size: 2733 bp

RefSeq ORF: 1374 bp

Locus ID: 1119

UniProt ID: [P35790](#)

Cytogenetics: 11q13.2

Domains: Choline_kinase

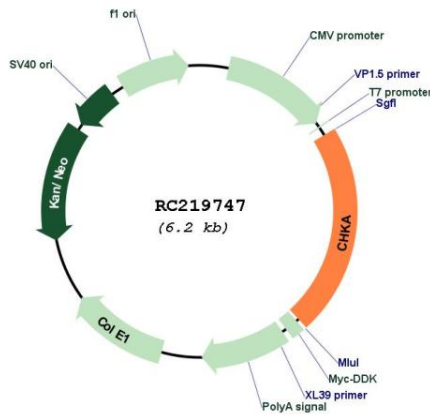
Protein Families: Druggable Genome

Protein Pathways: Glycerophospholipid metabolism, Metabolic pathways

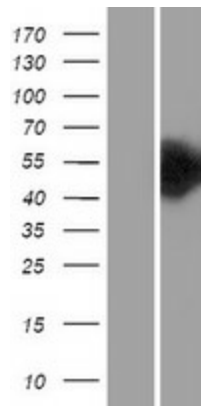
MW: 52.1 kDa

Gene Summary: The major pathway for the biosynthesis of phosphatidylcholine occurs via the CDP-choline pathway. The protein encoded by this gene is the initial enzyme in the sequence and may play a regulatory role. The encoded protein also catalyzes the phosphorylation of ethanolamine. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC219747



Western blot validation of overexpression lysate (Cat# [LY400512]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219747 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).