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Product datasheet for RC207209

Choline kinase alpha (CHKA) (NM_212469) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Choline kinase alpha (CHKA) (NM_212469) 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)

ORF Nucleotide Sequence:

>RC207209 representing NM_212469
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAAACCAAATTCTGCACCGGGGGCGAGGCGGAGCCCTCGCCGCTCGGGCTGCTGCTGAGCTGCGGTA
GCGGCAGCGCGGCCCCGGCGCCCGGCGTGGGGCAGCAGCGCGACGCCGCCAGCGACCTCGAGTCCAAGCA
GCTGGGCGGCCAACAGCCGCCGCTCGCGCTGCCCCCTCCGCCGCCGCTGCCGCTGCCGCTGCCGCTGCCC
CAGCCCCCGCCGCCGCAGCCGCCCGCAGACGAGCAGCCGGAGCCCCGGACGCGGCGCAGGGCCTATCTGT
GGTGCAAGGAGTTCCTGCCCGGCGCCTGGCGGGGCCTCCGCGAGGACGAGTTCCACATCAGTGTCATCAG
AGGCGGCCTTAGCAACATGCTGTTCCAGTGCTCCCTACCTGACACCACAGCCACCCTTGGTGATGAGCCT
CGGAAAGTGCTCCTGCGGCTGTATGGAGCGATTTTGCAGGTGGGGGCTGAGGCCATGGTTCTGGAGAGCG
TTATGTTTGCCATTCTCGCAGAGAGGTCACTTGGGCCAAAACTCTATGGCATCTTTCCCCAAGGCCGACT
GGAGCAGTTCATCCCGAGCCGGCGATTAGATACTGAAGAATTAGGTTTGCCAGATATTTCTGCAGAAATC
GCCGAGAAAATGGCTACATTTCATGGTATGAAAATGCCATTCAATAAGGAACCAAAATGGCTTTTTGGCA
CAATGGAAAAGTATCTAAAGGAAGTGCTGAGAATTAAATTTACTGAGGAATCCAGAATTAAAAAGCTCCA
CAAATTGCTCAGTTACAATCTGCCCTTGGAACTGGAAAACCTGAGATCATTGCTTGAATCTACTCCATCT
CCAGTTGTATTTTGTCATAATGACTGTCAAGAAGGTAATATCTTGTTGCTGGAAGGCCGAGAGAATTCTG
AAAAACAGAAACTGATGCTCATTGATTTCGAATACAGCAGTTACAATTACAGGGGATTCGACATTGGAAA
TCACTTCTGTGAGTGGATGTATGATTATAGCTATGAAAAATACCCTTTTTTCAGAGCAAACATCCGGAAG
TATCCCACCAAGAAACAACAGCTCCATTTTATTTCCAGTTACTTGCCTGCATTCCAAAATGACTTTGAAA
ACCTCAGTACTGAAGAAAAATCCATTATAAAAGAAGAAATGTTGCTTGAAGTTAATAGGTTTGCCCTTGC
ATCTCATTTCCTCTGGGGACAGTGGTCCATTGTACAAGCCAAGATTTCATCTATTGAATTTGGGTACATG
GACTACGCCCAAGCAAGGTTTGATGCCTATTTCCACCAGAAGAGGAAGCTTGGGGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207209 representing NM_212469
Red=Cloning site Green=Tags(s)

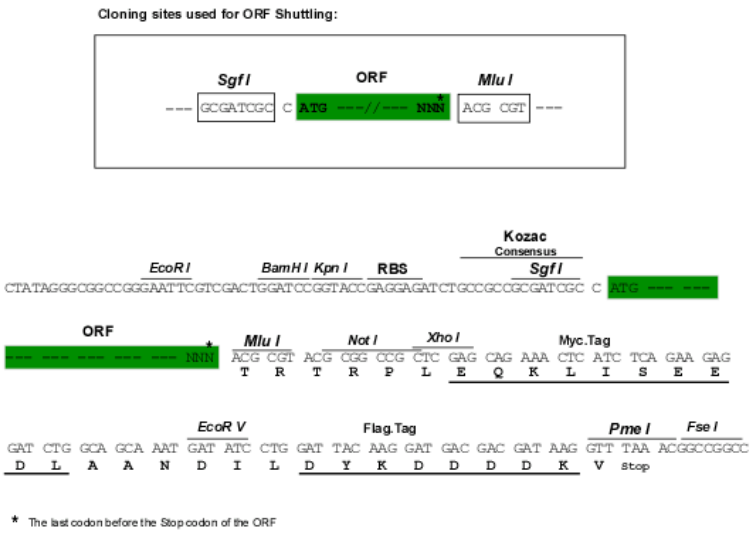
MKTKFCTGGEAEPSPLGLLLSCGSGSAAPAPGVGQQRDAASDLESKQLGGQQPPLALPPPPPLPLPLPLP
QPPPPQPPADEQPEPRTRRRAYLWCKEFLPGAWRGLREDEFHISVIRGGLSNMLFQCSLPDTTATLGDEP
RKVLLRLYGAILQVGAEAMVLESVMFAILAERSLGPKLYGIFPQGRLEQFIPSRRLDTEELGLPDISAEI
AEKMATFHGMKMPFNKEPKWLFGTMEKYLKEVLRIKFTEESRIKKLHKLLSYNLPLELENLRSLLESTPS
PVVFCHNDCQEGNILLLEGRENSEKQKLMLIDFEYSSYNYRGFDIGNHFCEWMYDYSYEKYPFFRANIRK
YPTKKQQLHFISSYLPAFQNDFENLSTEEKSIIKEEMLLEVNRFALASHFLWGQWSIVQAKISSIEFGYM
DYAQARFDAYFHQKRKLGV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2944_f02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_212469

ORF Size: 1317 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_212469.1, NP_997634.1

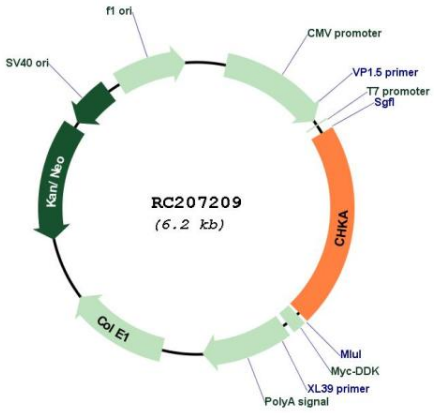
RefSeq Size: 2679 bp

RefSeq ORF: 1320 bp

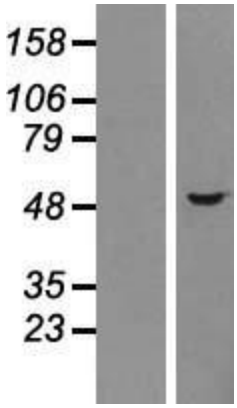
Locus ID: 1119

UniProt ID:	P35790
Cytogenetics:	11q13.2
Protein Families:	Druggable Genome
Protein Pathways:	Glycerophospholipid metabolism, Metabolic pathways
MW:	50 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]

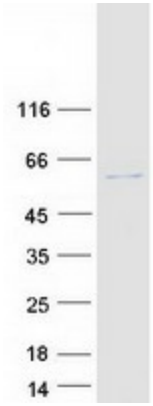
Product images:



Circular map for RC207209



Western blot validation of overexpression lysate (Cat# [LY403943]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207209 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CHKA protein (Cat# [TP307209]). The protein was produced from HEK293T cells transfected with CHKA cDNA clone (Cat# RC207209) using MegaTran 2.0 (Cat# [TT210002]).