

Product datasheet for **RC210253**

CHKL (CHKB) (NM_005198) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHKL (CHKB) (NM_005198) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CHKL
Synonyms:	CHETK; CHKL; CK; CKB; CKEKB; EK; EKB; MDCMC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210253 representing NM_005198 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGCGGCCGAGGCGACAGCTGTGGCCGAAGCGGGCTGTTGGCGGCTGCCTGGCCAAAGACGGCTTGC
AGCAGTCTAAGTGCCCGGACACTACCCAAAACGGCGCGCGCCTCGTCGCTGTCGCGTGACGCCGAGCG
CCGAGCCTACCAATGGTGCCGGGAGTACTTGGCGGGGCTGGCGCCGAGTGCAGCCGAGGAGCTGAGG
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TTGGCGAGGAGCCCCGGGAGGTGCTTCTCGGGCTGTACGGAGCCATCTTGCAGGGCGTGGACTCCCTGGT
GCTAGAAAGCGTGATGTTGCGCCATACTTGGGAGCGGTGCTGGGGCCCCAGCTGTACGGAGTCTTCCCA
GAGGGCCGGCTGGAACAGTACATCCCAAGTCGGCCATTGAAAACCTCAAGAGCTTCGAGAGCCAGTGTGT
CAGCAGCCATTGCCACGAAGATGGCGCAATTTTCATGGCATGGAGATGCCTTTACCAAGGAGCCCCACTG
GCTGTTTGGGACCATGGAGCGGTACCTAAAACAGATCCAGGACCTGCCCCAACTGGCCTCCCTGAGATG
AACCTGCTGGAGATGTACAGCCTGAAGGATGAGATGGCAACCTCAGGAAGTTACTAGAGTCTACCCAT
CGCCAGTCGTCTTCTGCCACAATGACATCCAGGAAGGGAACATCTTGCTGCTCTCAGAGCCAGAAATGC
TGACAGCCTCATGCTGGTGGACTTCGAGTACAGCAGTTATAACTATAGGGGCTTTGACATTGGGAACCAT
TTTTGTGAGTGGGTTTATGATTATACTCAGGGAATGGCCTTTCTACAAAGCAAGGCCACAGACTACC
CAGTCAAGAACAGCAGTTGCATTTTATTGCTCATTACCTGGCAGAGGCAAGAAAGGTGAGACCCCTCTC
CCAAGAGGAGCAGAGAAAAGTGAAGAAGATTGCTGGTGAAGTCAGTCGGTATGCTCTGGCATCCCAT
TTCTTCTGGGTCTGTGGTCCATCCTCCAGGCATCCATGTCCACCATAGAATTTGGTTACTTGACTATG
CCCAGTCTCGTTCCAGTTCTACTTCCAGCAGAAGGGGCAGTGACCAAGTGTCCACTCCTCATCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210253 representing NM_005198
 Red=Cloning site Green=Tags(s)

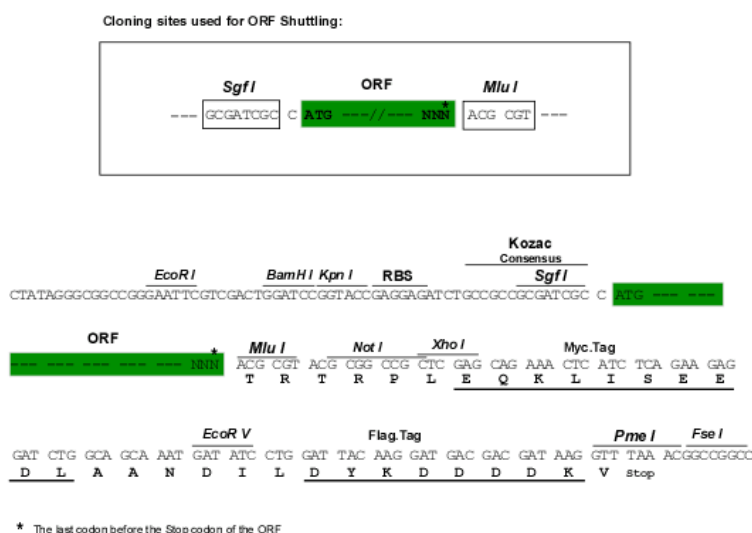
MAAEATAVAGSGAVGGCLAKDGLQQSKCPDTPKRRRASSLSRDAERRAYQWCREYLGGAWRRVQPEELR
 VYPVSGGLSNLLFRCSLPDHLPSVGEEPREVLLRLYGAILQGVDSLVLSEVMFAILAERSLGPQLYGVFP
 EGRLEQYIPSRPLKTQELREPVLSAAIATKMAQFHGMEMPFTKEPHWLFMTMERYLKQIQDLPTGLPEM
 NLLMYSKDEMGNLRLKLESTPSPVVFCHNDIQEGNILLSEPENADSLMLVDFEYSSNYRGFIDGNH
 FCEWVYDYTHEEWPYKARPTDYPTQEQLHFIRHYLAEAKKGETLSQEEQRKLEEDLLVEVSRALASH
 FFWGLWSILQASMSTIEFGYLDYAQSRFQFYFQQKQLTSVHSSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3623_d05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005198

ORF Size: 1185 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_005198.5](#)

RefSeq Size: 1595 bp

RefSeq ORF: 1188 bp

Locus ID: 1120

UniProt ID: [Q9Y259](#)

Cytogenetics: 22q13.33

Domains: Choline_kinase

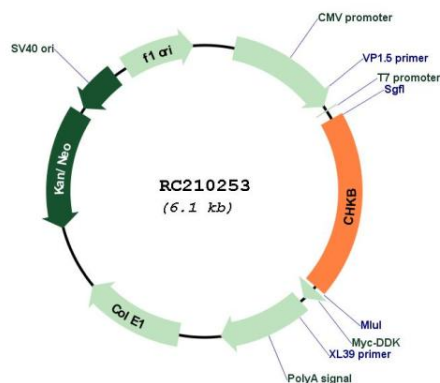
Protein Families: Druggable Genome

Protein Pathways: Glycerophospholipid metabolism, Metabolic pathways

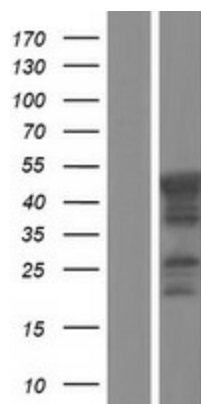
MW: 45.1 kDa

Gene Summary: Choline kinase (CK) and ethanolamine kinase (EK) catalyze the phosphorylation of choline/ethanolamine to phosphocholine/phosphoethanolamine. This is the first enzyme in the biosynthesis of phosphatidylcholine/phosphatidylethanolamine in all animal cells. The highly purified CKs from mammalian sources and their recombinant gene products have been shown to have EK activity also, indicating that both activities reside on the same protein. The choline kinase-like protein encoded by CHKL belongs to the choline/ethanolamine kinase family; however, its exact function is not known. Read-through transcripts are expressed from this locus that include exons from the downstream CPT1B locus. [provided by RefSeq, Jun 2009]

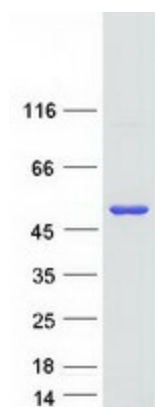
Product images:



Circular map for RC210253



Western blot validation of overexpression lysate (Cat# [LY417454]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210253 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CHKB protein (Cat# [TP310253]). The protein was produced from HEK293T cells transfected with CHKB cDNA clone (Cat# RC210253) using MegaTran 2.0 (Cat# [TT210002]).