

Product datasheet for RC211299

Casein Kinase 2 beta (CSNK2B) (NM_001320) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Casein Kinase 2 beta (CSNK2B) (NM_001320) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Casein Kinase 2 beta
Synonyms:	CK2B; CK2N; Ckb1; Ckb2; CSK2B; G5A; POBINDS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211299 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCAGCTCAGAGGAGGTGTCCTGGATTTCTGGTTCTGTGGGCTCCGTGGCAATGAATTCCTCTGTG
AAGTGGATGAAGACTACATCCAGGACAAATTTAATCTTACTGGACTCAATGAGCAGGTCCCTCACTATCG
ACAAGCTCTAGACATGATCTTGGACCTGGAGCCTGATGAAGAAGTGAAGACAACCCCAACCAGAGTGAC
CTGATTGAGCAGGCAGCCGAGATGCTTTATGGATTGATCCACGCCGCTACATCCTTACCAACCGTGGCA
TCGCCCAGATGTTGAAAAGTACCAGCAAGGAGACTTTGGTTACTGTCTCGTGTGACTGTGAGAACCA
GCCAATGCTTCCATTGGCCTTTTCAGACATCCCAGGTGAAGCCATGGTGAAGCTCTACTGCCCAAGTGC
ATGGATGTGTACACCCAAGTCATCAAGACACCATCACACGGATGGCGCCTACTTCGGCACTGGTTTCC
CTCACATGCTCTTCATGGTGCATCCCGAGTACCGGCCAAGAGACCTGCCAACCAGTTTGTGCCAGGCT
CTACGGTTTCAAGATCCATCCGATGGCCTACCAGCTGCAGCTCCAAGCCGCCAGCAACTTCAAGAGCCCA
GTCAAGACGATTTCGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC211299 protein sequence
Red=Cloning site Green=Tags(s)

MSSSEEVSWISWFCGLRGNEFFCEVDEDIYQDKFNL TGLNEQVPHYRQALDMILDLEPDEELEDNPNQSD
 LIEQAAEMLYGLIHARYIL TNRGIAQMLEKYQQGDFGYCPRVYCNQPMPLPIGLSDIPGEAMVKLYCPKC
 MDVYTPKSSRRHHHTDGA YFGTGFPHMLFMVHPEYRPKR PANQFVPRLYGFKIHPMAYQLQLQAASNFKSP
 VKTIR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6010_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001320

ORF Size: 645 bp

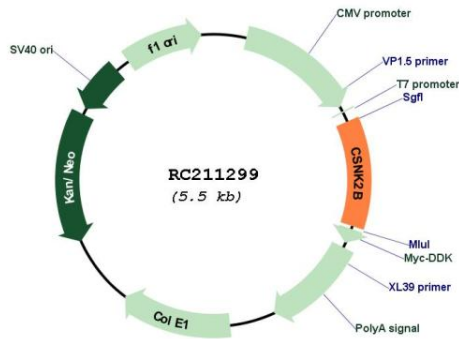
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

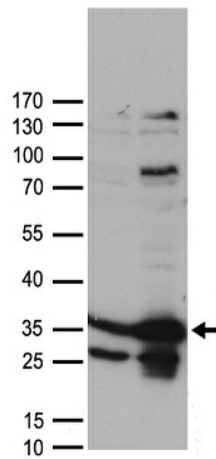
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_001320.7
RefSeq Size:	1149 bp
RefSeq ORF:	648 bp
Locus ID:	1460
UniProt ID:	P67870
Cytogenetics:	6p21.33
Domains:	CK_II_beta
Protein Families:	Druggable Genome
Protein Pathways:	Adherens junction, Tight junction, Wnt signaling pathway
MW:	24.9 kDa
Gene Summary:	This gene encodes the beta subunit of casein kinase II, a ubiquitous protein kinase which regulates metabolic pathways, signal transduction, transcription, translation, and replication. The enzyme is composed of three subunits, alpha, alpha prime and beta, which form a tetrameric holoenzyme. The alpha and alpha prime subunits are catalytic, while the beta subunit serves regulatory functions. The enzyme localizes to the endoplasmic reticulum and the Golgi apparatus. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2013]

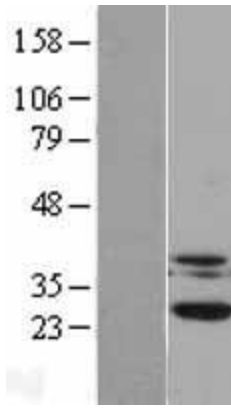
Product images:



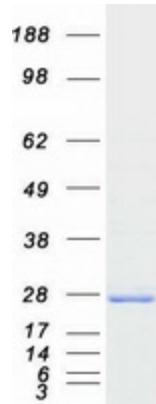
Circular map for RC211299



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CSNK2B (Cat# RC211299, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CSNK2B antibody (Cat# [TA890031]). Positive lysates [LY400525] (100ug) and [LC400525] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400525]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211299 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CSNK2B protein (Cat# [TP311299]). The protein was produced from HEK293T cells transfected with CSNK2B cDNA clone (Cat# RC211299) using MegaTran 2.0 (Cat# [TT210002]).