

## Product datasheet for **RC220764**

### CDKL5 (NM\_003159) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CDKL5 (NM_003159) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDKL5
Synonyms:	CFAP247; DEE2; EIEE2; ISSX; STK9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220764 representing NM_003159 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGATTCTAACATTGGTAATGTGATGAATAAATTTGAGATCCTTGGGGTTGTAGGTGAAGGAGCCT  
ATGGAGTTGACTTAAATGCAGACACAAGGAAACACATGAAATTTGGCGATCAAGAAATCAAGGACAG  
TGAAGAAAATGAAGAAGTCAAAGAAACGACTTTACGAGAGCTTAAATGCTTCGGACTCTCAAGCAGGAA  
AACATTGTGGAGTTGAAGGAAGCATTTCGTCGGAGGGGAAAGTTGACTTGGTGTGGTATGTTGAAA  
AAAATATGCTCGAATTGCTGGAAGAAATGCCAAATGGAGTTCACCTGAGAAAGTAAAAAGCTACATCTA  
TCAGCTAATCAAGGCTATTCAGTGGTGCATAAGAATGATATTGTCCATCGAGATATAAAACCAGAAAAT  
CTCTTAATCAGCCACAATGATGTCTAAACTGTGTGACTTTGGTTTTGCTCGTAATCTGTGAGAAGGCA  
ATAATGCTAATTACACAGAGTACGTTGCCACCAGATGGTATCGGTCCCCAGAACTCTTACTTGGCGCTCC  
CTATGGAAAGTCCGTGGACATGTGGTCGGTGGGCTGTAATCTTGGGGAGCTTAGCGATGGACAGCCTTTA  
TTTCTGGAGAAAGTGAATTTGACCAACTTTTTACTATTGAGAAGGTGCTAGGACCACTTCCATCTGAGC  
AGATGAAGCTTTTCTACAGTAATCCTCGCTTCCATGGGCTCCGGTTTCCAGCTGTTAACCATCCTCAGTC  
CTTGGAAAAGAAGTACCTTGAATTTTGAATAGTGTCTACTTGGACCTAATGAAGAATTTACTGAAGTTG  
GACCCAGCTGACAGATACTTGACAGAACAGTGTGTTGAATCACCCACATTTCAAACCCAGAGACTCTGG  
ATCGTTCTCCTCAAGGTCAGCAAAAAGAAAACCTTACCATGTGGAAAGCAGCACATTGTCTAATAGAAA  
CCAAGCCGGCAAAAGTACTGCTTTGCACTCTACCACAGATCTAACAGCAAGGACATCCAGAACCTGAGT  
GTAGGCCCTGCCCGGGCTGACGAAGGTCTCCCTGCCAATGAAAGCTTCTAAATGGAAACCTTGCTGGAG  
CTAGTCTTAGTCCACTGCACACCAAAACCTACCAAGCAAGCAGCCAGCCTGGGTCTACCAGCAAAGATCT  
CACCAACAACAACATAACCACACCTTCTTAGCCAAAAGAAGCCAAGTCAAAAACAGAGTTTGATTTTAAT  
ATTGACCCAAAGCCTTCAAGAGGCCAGGGACAAAGTACCTCAAGTCAAACAGCAGATCTCAGCAGAACC  
GCCACTCATTGAAAGCTCTCAAAGCAAAGCTGGGACTGCAGCCCAATGAAAAGCAGAGTCGGCA  
TAGCTATATTGACACAATCCCCAGTCTCTAGGAGTCCCTCTACAGGACCAAGGCCAAAAGCCATGGG



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GCACTGAGTGAAGTCTGTGAGCAACCTTTCTGAAGCCAGGGCCAAATTCGCGAGCCCAGTACCA  
 GTAGGTAAGTCTCCATCTAGCTGCTTAGACTTGAATTTCTCCACCAGCCCAACCCACCAGACACAGTGA  
 CACGAGAACTTTGCTCAGCCCTTCTGGAAGAAATTAACCGAAATGAGGGAAACGCTGGACTCACGTCGAACC  
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 TCCTCATAGGCATTCTATGTATGTGACCCGTGACAAAGTGAGAGCCAAGGGCTTGGATGGAAGCTTGAGC  
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 CTCCAGAGATGACTGTGGCAAGATCTTCGGTCAAAGAGACCTCCAGAGAAGGCACCTCTTCTTCCATAC  
 ACGCCAGAAGTCTGAGGGTGGAGTGTATCATGACCCACACTCTGATGATGGCACAGCCCCAAAGAAAAT  
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 ACAATTCTTCCATGAAAATAATGTGTCAACTAGAGTTTCTTCTTACCATCAGAGAGCAGTTCTGGAAC  
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 CAACATCCGGCAGGAACCCGACCGAAGGGCAGGCCAGCCCTCCAGTGCAGACGGTGGATGTGATGGC  
 AGAAGACAGAGACACCAATTCGGACCCCAAGATAGACGCTTCAATGTTAAGGACGACAGAACAAAGGAG  
 AATACTTCTGCTGTGGTACCCAAAGAAGCCTCACACTCCGTGCGTCCAAACCGAGCCCTTATCGTCC  
 AATCTCCAGTCTGCTCCCTATCCAGTACTCCAGTCCGAGGCACTTCCATGTGCCGACACTCCAGGTC  
 CGAGGCACTGATGCTTTCAGTGCACCAACCCAGCAATCCGGGTTCTTTCTTCTGAGACAGTTATGA  
 GGAAGCCCTGATTCACAGGGCCAGGTAACCAAGCTGCGCTCCTGACATACCATGAGAATGCGGCACT  
 GACGGGCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC220764 representing NM\_003159

Red=Cloning site Green=Tags(s)

MKIPNIGNVMNKFEILGVVGEYGVVVKCRHKETHEIVAIAIKFKDSEENEEVKETTLRELKMLRTLKQE  
 NIVELKEAFRRRGLYLVEYVEKNMLELLEEMPNGVPEKVKSYIYQLIKAIHWCHKNDIVHRDIKPEN  
 LLISHNDVLKLCDFGFARNLSEGNANYEYVATRWYRSPPELLLGAPYGKSVDMMWSVGCILGELSDGQPL  
 FPGESEIDQLFTIQKVLGPLPSEQMKLFYSNPRFHGLRFPVAVNHPQSLERRYLGILNSVLLDLMKNLLKL  
 DPADRYL TEQCLNHPTFQTQRLDRSPSRSAKRKPYHVESSTLSNRNQAGKSTALQSHHRSNSKDIQNL  
 VGLPRADEGLPANESFLNGNLAGASL SPLHTKYQASSQPGSTSKDL TNNNIPHLL SPKEAKSKTEFDN  
 IDPKPSEPGTKYLKSNRSQNRHSFMESSQSKAGTLQPNKQSRHSYIDTIPQSSRSPSYRTKAKSHG  
 ALSDSKSVSNLSEARAQIAEPSTSRYPSSCLDLNSPTSPTRHSDTRTLLSPSGRNNRNEGTLDSRRT  
 TTRHKTMEELKLPEHMDSSHSLSAPHEFSYGLGYTSPFSSQQRPHRHSMYVTRDKVRAKGLDGSLS  
 IGQGMARANSLQLSPQPEQLPPEMVARSSVKETSREGTSSFHTRQKSEGGVYHDPHSDGTAPKEN  
 RHLVNDPVRVGSFYRVPSRPDNSFHENNVSTRVSSLPESSSGTNHRSKRQPAFDPWKPENISHSEQ  
 LKEKEKQGFRRSMKMKKKSQTVPNSDSPDLLTLQKSIHASTPSSRPKEWRPEKISDLQTSQPLKSLR  
 KLLHLSSASNHPASSDPRFQPLTAQQTNSFSEIRIHPLSQASGGSSNIHQEPAPKGRPALQLPDGGCDG  
 RRQRHSGPQDRRFMLRTTEQQGEYFCGDPKPKPHTPCVFNALHRPISSPAPYVQLVQVGTSMCPTLQV  
 RGTDAFSCPTQSGSFFVRHVMREALIHRAQVNQAALLTYHENAALTKG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg4124\\_f06.zip](https://cdn.origene.com/chromatograms/mg4124_f06.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_003159

**ORF Size:** 3090 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\\_003159.2](#), [NP\\_003150.1](#)

**RefSeq Size:** 3434 bp

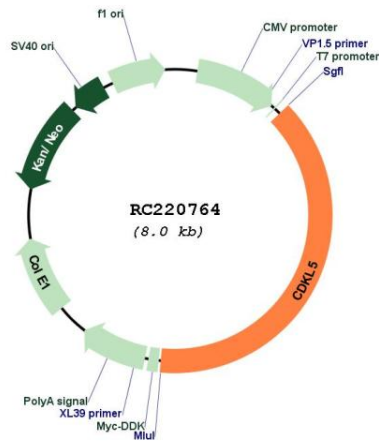
**RefSeq ORF:** 3093 bp

**Locus ID:** 6792

**UniProt ID:** [O76039](#)

**Cytogenetics:** Xp22.13  
**Domains:** pkinase, TyrKc, S\_TKc  
**Protein Families:** Druggable Genome, Protein Kinase  
**MW:** 115.4 kDa  
**Gene Summary:** This gene is a member of Ser/Thr protein kinase family and encodes a phosphorylated protein with protein kinase activity. Mutations in this gene have been associated with X-linked infantile spasm syndrome (ISSX), also known as X-linked West syndrome, and Rett syndrome (RTT). Alternate transcriptional splice variants have been characterized. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC220764