

Product datasheet for MR211488

Cit (BC023775) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cit (BC023775) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cit
Synonyms:	CR1K, CR1K-SK, citron-N, Cit-k
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR211488 representing BC023775 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGGATCGC

ATGGAGGCTCTGAAGACGACATGCACCATGTTGGAGGAGCAGGTCTGGACCTGGAGGCCCTGAACGACG
AGCTGCTGGAGAAGGAGCGCCAGTGGGAGGCCCTGGCGGAGCGTCTTGGCGACGAGAAGTCCCAGTTCGA
GTGTGCGAGTTCGAGAGCTACAGAGGATGCTGGACACCGAGAAGCAGAGCAGGGCTAGGGCCGATCAGCGG
ATCACCGAGTCCGCGCCAGGTGGTGGAGTTGGCGGTGAAGGAACACAAGGCCGAGATTCTTGTCTGCAGC
AGGCTCTCAAGGAGCAGAAGCTCAAAGCCGAGAGCCTGTCCGACAAGCTCAACGACCTGGAGAAGAGCA
CGCCATGCTGGAGATGAACGCCCGGAGCTTACAGCAGAACTAGAGACAGAGCGGGAGCTCAAACAGAGG
CTTCTGGAGGAGCAAGCCAAATTGCAGCAGCAGATGGACCTGCAGAAGAACCACATCTTCAGACTGACGC
AAGGGCTGCAGGAGGCGCTGGACCGGGCGGATCTGCTGAAGACAGAAAGGAGCGACCTGGAGTACCAGCT
GGAAAACATTCAGGTTCTACTCTCACGAGAAAGTAAAAAGGAGGCAATCTCTCAGCAAACAAA
CTCATTGATTTCTGCAAGCCAAAATGGACCGCTGCTAAAAAGAAAAGGGTTTATTTAGTCGACGGA
AAGAGGACCCTGCTTTGCCACACAGGTTCTCTGCAGTACAATGAGCTGAAGTACGCTGAAAGGAAAAGGA
GAAAGCCCGATGCGCGGAGCTGGAGGAGGCCCTTCAGAAGACCCGCATCGAACTCCGCTCTGCGCGGGAG
GAAGCTGCCACCCGCAAAGCCACGAGCACCCGCAACCCGCTCTACGCCAGCCACTGCGAGGAGCAGATCG
CCATGTCTGCCATTGTGCGGTGCGCCGAGCACCAGCCAGTGCATGAGCCTGCTTGGCCACCATCCAG
CCGAGAAAGGAGTCTCAACTCCAGAGGAATTCAGCCGGCTGCTGAAAGAGCGCATGCACCACAACATC
CCTCACCGTTTAAATGTGGCCCTGAACATGAGAGCCACCAAGTGCAGGCTGTGTCTGGATACTGTGCACT
TTGGAGCCAGGCATCCAATGCCTCGAATGTCAAGTGTGTGACCCCAAATGCTCCACCTGCTTGGC
CGTACCTGTGGCCTGCCAGTGAATATGCCACACTTCACTGAGGCCCTTCTGCCGGGACAAAATGAAC
TCCCCGGGCTCCAGAGCAAGGAGCCTGGCAGCAGCTTGACCTGGAAGGGTGGATGAAAGTGCCAGAA
ATAACAAACGGGGACAGCAAGGCTGGGACAGGAAGTACATTGTTCTGGAGGGGTCAAAGTCTCATCTA
TGACAATGAAGCCAGAGAAGCTGGACAGAGGCCGGTGAAGAATTTGAGCTGTGCCTTCTGACGGGGAC
GTATCTATTATGGTGGCCTGGTGCTTCAAGACTGCAAAATACCGCAAAGCAGATGTCCCATACATCC



[View online >](#)

TGAAGATGGAGTCTACCCACACACCACCTGCTGGCCTGGGAGAACCCTCTACTTGTAGCACCAGCTT
 CCCCACAAGCAGCGCTGGGTACCCGCCTTAGAATCTGTGTCGTCAGGTGGGAGAGTTTCTAGGGAAAAG
 GCCGAAGCCGATGCTGCACGTGACCATACTTCGAGTGAGCATCAGCCAGTGTGGGTTGAGAAATTA
 GAACTCTGCTGAACTGGAGGGCGATACCCGGCTTACATGAACTGCACCCTGCCCTTCAGTGACCA
 GGTGGTCTGGTGGGCACGGAGGAAGGCCTCTACGCCCTGAATGTCTTAAAACTCCTTAACCCACATC
 CCAGGGATTGGCGCAGTCTTCAAATTTACATCATCAAGGACCTGGAGAAGCTGCTCATGATAGCAGGGG
 AAGAGCGGGCTCTGTGCCTGGTGGACGTGAAGAAGGTGAAGCAGTCCCTGGCGCAGTACACCTGCCTGC
 CCAGCCCGACGTCTCCCAACATATTGAAGCCGTCAAAGGCTGCCACTTGTCGCTGCTGGCAAGATC
 GAGAACAGCCTGTGCATCTGCGCCGCTATGCCAAGCAAAGTCGTATCCTCCGCTACAATGACAACCTCA
 GCAAGTACTGCATCCGCAAGGAGATCGAGACCTCAGAGCCCTGCAGCTGTATCCACTTACCAACTACAG
 CATCCTCATTGGGACCAACAAATTTCTATGAGATCGACATGAAGCAGTACACGCTTGTAGAGTTCTGGAC
 AAGAACGACCATTCCTTGGCACCTGCTGTGTTGCGCTCCTCGTCAACAGCTTCCCTGTCTCCATTGTGC
 AGGCGAACAGCGCCGGCAGCGAGAAGAATACCTGCTGTGCTTCCACGAATTTGGGGTGTTCGTGGATTC
 TTACGGAAGCAGTACCCGACAGATGATCTTAAGTGGAGTCGCTTACCTTGGCCTTCCGCTACAGAGAA
 CCTTATCTGTTTGTGACTCACTCAACTCCCTGGAAGTATTGAGATCCAGGCCAGATCCTCACTGGGGA
 GCCCTGCCGAGCATATCTGAAATTCAAACCCTCGCTACCTGGGCCCCGCGATTTCTCCGGAGCGAT
 TTACCTGGCCTCCTCATACCAGGACAAGTTAAGGGTCATATGCTGCAAAGGAAACCTCGTGAAGGAGTCA
 GGCAGTGAAGCAGCACCAGGTCCTCCACTCCCGCAGCCCCAACAAAGCGAGGCCACCAACATAACAAG
 AGCACATACCAAAACGCGTGGCCTCCAGCCCGGCCACCGGAAGGCCCCAGCCACCCCGAGAGCCAAG
 CACACCGCACCCTACCAGACAGAGAGGGTCGGACAGAGCTGCCAGGGACAAGTCTCCAGGCCGCCCT
 CTGGAGCGGGAGAAGTCCCAGGCCGAATGCTCAGCACTAGGAGAGAGCGGTCCCAGGGAGACTGTTTG
 AAGACAGCAGCAGGGGCCGGCTGCCTGCAGGAGCAGTGAAGACCCACTGTCCAGGTTAAACAAGGTCG
 GGACCAGTCTTCAGTA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>MR211488 representing BC023775
 Red=Cloning site Green=Tags(s)

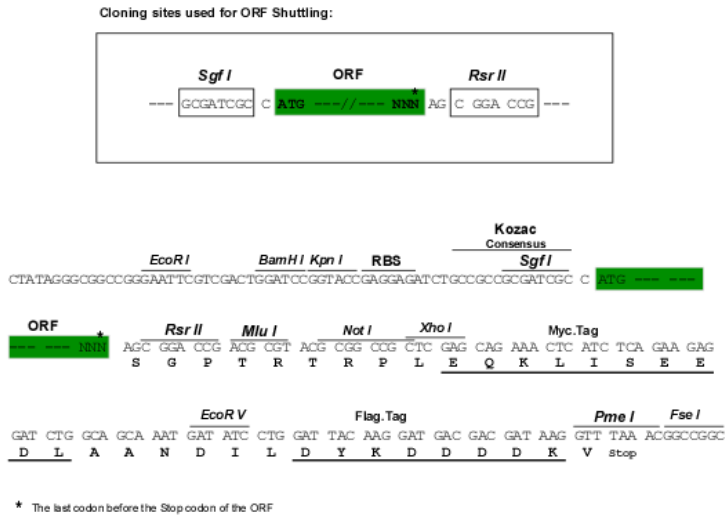
MEALKTTCTMLEEQVLDLEALNDELLEKERQWEAWRSVLGDEKSQFECRVRELQRM LDTEKQSRARADQR
 ITESRQVVELAVKEHKAIEILALQQALKEQKLKAESLSDKLNDEKHAMLEMNARSLQQKLETERELKQR
 LLEEQAKLQQQMDLQKNHIFRLTQGLQEALDRADLLKTERSDLEYQLENIQVLYSHEKVKMEGTISQQTK
 LIDFLQAKMDQPAKKKGLFSRRKEDPALPTQVPLQYNELKLALEKEKARCAELEALQKTRIELRSARE
 EAAHRKATDHPHPSTPATARQQIAMSIVRSPEHQPSAMSLAPPSSRRKESSTPEEF SRRLKERMHHNI
 PHRFNVGLNMRA TKCAVCLDTVHFGRQASKCLECQVMCHPKCSTCLPATCGLPAEYATHFTEAF CRDKMN
 SPGLQSKEPGSSLHLEGWMKVP RNKRQGGWRKYIVLEGSKVL IYDNEAREAGQRPVEEFELCLPDGD
 VSIHGAVGASELANTAKADVPYILKMESHPTTCWPGRTLYLLAPSPDKQRWVTALESVVAGGRVSREK
 AEADAARDHTSSEHQPVWVEKLLGNSLLKLEGGDRLDMNCTLPFSDQVVLVGTEEGLYALNVLKNSLTHI
 PGIGAVFQIYI IKDLEKLLMIAGEERALCLVDVKVKQSLAQSHLPAQPDVSPNIFEAVKGCHLFAAGKI
 ENSLCICAAMPSKVVILRYNDNL SKYCI RKEIETSEPCSCIHFTNYSILIGTNKFYEIDMKQYTLDFLD
 KNDHSLAPAVF ASSNSFPVSI VQANSAGQREYLLCFHEFGVFVDSYGRRSRTDDLKWSRLPLAFAYRE
 PYLFVTHFNSLEVIEIQARSSLGSPARAYLEIPNPRYLGP AISSGAIYLASSYQDKLRVICCKGNLVKES
 GTEQHRVPSTSRSPNKRGPPTYNEHITKRVASSPAPPEGPSHPREPSTPHRYRDRGRELRRDKSPGRP
 LEREKSPGRMLSTRRERSPGRLFEDSSRGRLPAGAVRTPLSQVNVKVDQSSV

SGP TRRRLEQKLI SEEDLAANDILDYKDDDDKV

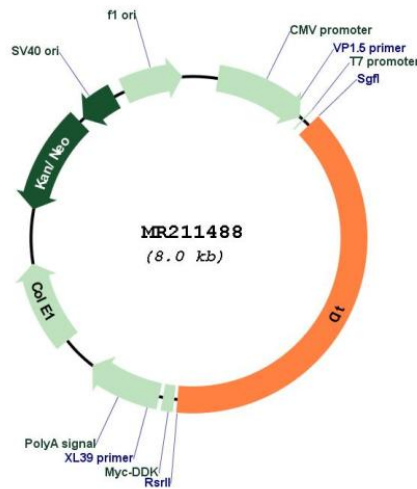
Restriction Sites:

Sgfl-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: BC023775

ORF Size: 3096 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.
RefSeq:	<u>BC023775.1</u>
RefSeq Size:	3506 bp
RefSeq ORF:	3098 bp
Locus ID:	12704
Cytogenetics:	5 F
MW:	128.5 kDa
Gene Summary:	Plays a role in cytokinesis. Required for KIF14 localization to the central spindle and midbody. Probable RHO/RAC effector that binds to the GTP-bound forms of RHO and RAC1. It probably binds p21 with a tighter specificity in vivo. Displays serine/threonine protein kinase activity. Plays an important role in the regulation of cytokinesis and the development of the central nervous system. Phosphorylates MYL9/MLC2.[UniProtKB/Swiss-Prot Function]