

Product datasheet for **RC400475**

CBL (NM_005188) Human Mutant ORF Clone

Product data:

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|---------------------------|---|
| Product Type: | Mutant ORF Clones |
| Product Name: | CBL (NM_005188) Human Mutant ORF Clone |
| Mutation Description: | C384Y |
| Affected Codon#: | 384 |
| Affected NT#: | c.1151 |
| Nucleotide Mutation: | CBL Mutant (C384Y), Myc-DDK-tagged ORF clone of Homo sapiens Cas-Br-M (murine) ecotropic retroviral transforming sequence (CBL) as transfection-ready DNA |
| Effect: | Missense |
| Symbol: | CBL |
| Synonyms: | C-CBL; CBL2; FRA11B; NSLL; RNF55 |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| Tag: | Myc-DDK |
| ACCN: | NM_005188 |
| ORF Size: | 2718 bp |
| Restriction Sites: | Sgfi-MluI |



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**ORF Nucleotide
Sequence:**

>RC400475 representing NM_005188
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGGCAACGTGAAGAAGAGCTCTGGGGCCGGGGCGGCAGCGGCTCCGGGGCTCGGGTTCGGGTG
 GCCTGATTGGGCTCATGAAGGACGCCTTCCAGCCGCACCACCACCACCACCACCCTCAGCCCCACCC
 GCCGGGACGGTGGACAAGAAGATGGTGGAGAAGTCTGGAAGCTCATGGACAAGGTGGTGGGTTGTGT
 CAGAACCACAAAGCTGGCGCTAAAGAATAGCCACCTTATATCTTAGACCTGCTACCAGATACCTACCAGC
 ATCTCCGTAATCTTGTCAAGATATGAGGGGAAGATGGAGACACTTGGAGAAAATGAGTATTTAGGGT
 GTTTATGGAGAATTTGATGAAGAAAATAAGCAAACCATAAAGCCTCTTCAAGGAGGAAAAAGAAAGATG
 TATGAGGAGAATCTCAGCCTAGGCGAAACCTAACCAAAGTGTCCCTCATCTTCAGCCACATGCTGGCAG
 AACTAAAAGGAATCTTCCAAGTGGACTCTTTCAGGGAGACACATTTCCGATTACTAAAGCAGATGCTGC
 GGAATTTTGGAGAAAAGCTTTTGGGGAAAAGACAATAGTCCCTTGAAGAGCTTTCGACAGGCTCTACAT
 GAAGTGCATCCCATCAGTCTGGGCTGGAGGCCATGGCTCTGAAATCCACTATTGATCTGACCTGCAATG
 ATTATATTTTCGGTTTTTGAATTTGACATCTTACCCGACTCTTTCAGCCCTGGTCTCTTTGCTCAGGAA
 TTGGAACAGCCTTGTGTAACCTCATCTGGCTACATGGCTTTTTTACGATGACGAAAGTAAAGCTCGG
 CTCCAGAAATTCATCACAAACCTGGCAGTTATATCTTCCGGCTGAGCTGTACTCGTCTGGGTCAGTGGG
 CTATTGGGTATGTTACTGCTGATGGGAACATTCCTCAGACAATCCCTCACAATAAACCTCTTCCAAGC
 ACTGATTGATGGCTTCAGGGAAGGCTTCTATTTGTTTCTGATGGACGAAATCAGAATCCTGATCTGACT
 GGCTTATGTGAACCAACTCCCAAGACCATATCAAAGTGACCCAGGAACAATATGAATTAATACTGTGAGA
 TGGGCTCCACTTCCAACATGTAAAAATATATGCTGAAAATGATAAGGATGTAAGATTGAGCCCTGTGG
 ACACCTCATGTGCACATCCTGTCTTACATCCTGGCAGGAATCAGAAGGTCAGGGCTGTCTTTCTGCCGA
 TGTGAAATTAAGGTAAGTGAACCCATCCTGGTGTAGATCCGTTTGTCTAGAGGGAGTGGCAGCCTGTTGA
 GGCAAGGAGCAGAGGGAGCTCCCTCCCAAAATATGATGATGATGATGATGAAACGAGCTGATGACTCT
 CTTTATGATGAAGGAATTGGCTGGTGGCAAGGTGGAACGGCCGCTTCTCCATTCTCCATGGCCCCACAA
 GCTTCCCTTCCCGGTGCCACCAGACTTGACCTTCTGCCGACGAGTATGTGTTCCCTCAAGTGCTT
 CTGCTCTTGGAACTGCTTCTAAGGCTGCTTCTGGCTCCCTTATAAAGACAAACCATTGCCAGTACCTCC
 CACACTTCGAGATCTTCCACCACCACCGCTCCAGACCGCCATATTCTGTTGGAGCAGAATCCCGACCT
 CAAAGACGCCCTTGCTTGTACACCAGGCGACTGTCCCTCCAGAGACAAACTGCCCCCTGTCCCTCTA
 GCCGCTTGGAGACTCATGGCTGCCCGGCCAATCCCAAAAGTACCAGTATCTGCCCAAGTTCCAGTGA
 TCCCTGGACAGGAAGAGAATTAACCAACCGGCACTCACTTCCATTTTCATTGCCCTCACAAATGGAGCCC
 AGACCAGATGTGCTTAGGCTCGGAAGCAGTTCAGTCTGGATACCTCCATGAGTATGAATAGCAGCCAT
 TAGTAGGTCCAGAGTGTGACCACCCCAAAATCAAACCTTCTCATCTGCCAATGCCATTTATTCTCTGGC
 TGCCAGACCTCTTCTGTGCCAAAACCTGCCACCTGGGGAGCAATGTGAGGGTGAAGAGGACACAGAGTAC
 ATGACTCCCTCTTCCAGGCTCTACGGCCTTTGGATACATCCAGAGTTCACGAGCATGTGATTGCGACC
 AGCAGATTGATAGCTGTACGTATGAAGCAATGTATAATATTAGTCCCAGGCGCCATCTATCACCAGAG
 CAGCACCTTTGGTGAAGGAATTTGGCCGAGCCCATGCCAACACTGGTCCCAGGAGTCAAGAAATGAG
 GATGATGGGTATGATGTCCAAAAGCCACTGTGCCGGCCGTGCTGGCCCGCCGAACCTCTCAGATATCT
 CTAATGCCAGCTCCTCCTTTGGCTGGTGTCTCTGGATGGTGTCTTACAACAAATGTCCTGAAGGTTCC
 CCAAGTTCCCAGAGGCTCCAAAACCTTCCCGGAGAAATCAACTCTGAACGAAAAGCTGGCAGCTGT
 CAGCAAGGTAGTGGTCTGCCGCTCTGCTGCCACCGCTCACCTCAGCTCTCCAGTGAATCGAGAACC
 TCATGAGTCAGGGTACTCCTACCAGGACATCCAGAAAGCTTTGGTCAATGCCAGAACAAACATCGAGAT
 GGCCAAAACATCCTCCGGGAATTTGTTCCATTTCTTCTCTGCCATGTAGCTACC

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC400475 representing NM_005188
 Red=Cloning site Green=Tags(s)

MAGNVKKSSGAGGSGSGSGSGLIQLMKDAFQPHHHHHHLSHPHPPGTVDKMKVEKCKWLMKDVVRLC
 QNPKLALKNSPPYILDLLPDTYQHLRTILSRYEGKMETLGENEYFRVFMENLMKKTQTISLFKEGKERM
 YEENSQPRRNLTKLSLIFSHMLAELKGIFFSGLFQGDTRITKADAAEFWRKAFGEKTI VPKSFRQALH
 EVHPISSGLEAMALKSTIDLTCNDYISVFEDIFTRLFQPWSSLLRNWNSLAVTHPGYMAFLTYDEVKAR
 LQKFIHKPGSYIFRLSCTRLGQWAIGYVTADGNILQTI PHNKPLFQALIDGFREGFYLPDGRNQNPDLT
 GLCEPTQDHIVTQEYELYCEMGSTFQLCKIYAENDKVKIEPCGHLMCTSLTTSWQESEGGQPCFCR
 CEIKGTEPIVVDPFDPRGSGSLLRQGAEGASPNYDDDDDERADDTLFMMKELAGAKVERPPSPFSMAPQ
 ASLPPVPPRLDLLPQRVCVPSSASALGTASKAASGSLHKDKPLVPPTLRDLPPPPPPDRPYSVGAESRP
 QRRPLPCTPGDCPSRDKLPPVPSRLGDSWLRPPIPKVPVSAPSSDPWTGREL TNRHSLPFLPSQMEP
 RPDVPRLGSTFSLDTSMSMNSSPLVGPECDHPKIKPSSSANAIYSLAARPLVPKLPPEQCEGEEDTEY
 MTPSSRPLRPLDTSQSSRACDCQQIDSCTYEAMYNISQSQAPSITESSTFGEGNLAHAHANTGPEESENE
 DDGYDVPKPPVAVLARRTLSDISNASSFGWLSLDGDPPTTNVTEGSQVPERPPKPPRRINSERKAGSC
 QQGSGPAASAATASPQLSSEIENLMSQYSYQDIQKALVIAQNNIEMAKNILREFVSISSPAHVAT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



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|--------------------------|--|
| OTI Disclaimer: | <p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p> |
| 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). |
| RefSeq: | NP_005179 |
| RefSeq Size: | 11241 bp |
| RefSeq ORF: | 2721 bp |
| Locus ID: | 867 |
| Cytogenetics: | 11q23.3 |
| Domains: | UBA, RING, Cbl_N |
| Protein Families: | Druggable Genome, Transcription Factors |
| Protein Pathways: | Chronic myeloid leukemia, Endocytosis, ErbB signaling pathway, Insulin signaling pathway, Jak-STAT signaling pathway, Pathways in cancer, T cell receptor signaling pathway, Ubiquitin mediated proteolysis |
| MW: | 99 kDa |
| Gene Summary: | <p>This gene is a proto-oncogene that encodes a RING finger E3 ubiquitin ligase. The encoded protein is one of the enzymes required for targeting substrates for degradation by the proteasome. This protein mediates the transfer of ubiquitin from ubiquitin conjugating enzymes (E2) to specific substrates. This protein also contains an N-terminal phosphotyrosine binding domain that allows it to interact with numerous tyrosine-phosphorylated substrates and target them for proteasome degradation. As such it functions as a negative regulator of many signal transduction pathways. This gene has been found to be mutated or translocated in many cancers including acute myeloid leukaemia, and expansion of CGG repeats in the 5' UTR has been associated with Jacobsen syndrome. Mutations in this gene are also the cause of Noonan syndrome-like disorder. [provided by RefSeq, Jul 2016]</p> |