

Product datasheet for **RG213627**

CDC42 Binding Protein Kinase Beta (CDC42BPB) (NM_006035) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC42 Binding Protein Kinase Beta (CDC42BPB) (NM_006035) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CDC42 Binding Protein Kinase Beta
Synonyms:	MRCKB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213627 representing NM_006035 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGGCCAAGGTGCGGCTCAAGAAGCTGGAGCAGCTGCTCCTGGACGGGCCCTGGCGCAACGAGAGCG
CCCTGAGCGTGGAAACGCTGCTCGACGTGCTCGTCTGCCTGTACACCGAGTGCAGCCACTCGGCCCTGCG
CCGCGACAAGTACGTGGCCGAGTTCCTCGAGTGGGCTAAACCATTTACACAGCTGGTAAAGAAATGCAG
CTTCATCGAGAAGACTTTGAAATAATTAAGTAATTGGAAGAGGTGCTTTTGGTGAGGTTGCTGTTGTCA
AAATGAAGAATACTGAACGAATTTATGCAATGAAAATCCTCAACAAGTGGGAGATGCTGAAAAGAGCAGA
GACCGCGTGTCCGAGAGGAGCGCGATGTGCTGGTGAACGGCGACTGCCAGTGGATCACCGCGCTGCAC
TACGCCTTTCAGGACGAGAACCCTGTACTTAGTCATGGATTACTATGTGGGTGGTGATTTACTGACCC
TGCTCAGCAAATTTGAAGACAAGCTTCCGGAAGATATGGCGAGGTTCTACATTGGTGAATGGTGTGCG
CATTGACTCCATCCATCAGCTTCATTACGTGCACAGAGACATTAACCTGACAAATGCTCTTTTGGACGTG
AATGGTCATATCCGCCTGGCTGACTTTGGATCATGTTTGAAGATGAATGATGATGGCACTGTGCAGTCT
CCGTGGCCGTGGGCACACCTGACTACATCTCGCCGAGATCCTGCAGGCGATGGAGGACGGCATGGGCAA
ATACGGCCCTGAGTGTGACTGGTGGTCTCTGGTGTCTGCATGTATGAGATGCTCTATGGAGAAACGCCG
TTTTATGCGGAGTCACTCGTGGAGACCTATGGGAAGATCATGAACCATGAAGAGCGATTCCAGTCCCAT
CCCATGTCACGGATGTATCTGAAGAAGCGAAGGACCTCATCCAGAGACTGATCTGCAGTAGAGAACGCCG
GCTGGGGCAGAATGGAATAGAGGATTTCAAAAAGCATGCGTTTTTTGAAGGTCTAAATTGGGAAAATATA
CGAAACCTAGAAGCACCTTATATTCCTGATGTGAGCAGTCCCTCTGACACATCCAACCTTCGACGTGGATG
ACGACGTGCTGAGAAACACGAAATATTACCTCCTGGTTCTCACACAGGCTTTTCTGGATTACATTTGCC
ATTCATTGGTTTTACATTCACAACGAAAGCTGTTTTTCTGATCGAGGCTCTCTGAAGAGCATAATGCAG
TCCAACACATTAACCAAGATGAGGATGTGCAGCGGGACCTGGAGCACAGCCTGCAGATGGAAGCTTACG
AGAGGAGGATTCGAGGCTGGAACAGGAGAAGCTGGAGCTGAGCAGGAAGCTGCAAGAGTCCACCCAGAC
CGTGCAGTCCCTCCAGGCTCATCTCGGCCCTCAGCAATTCAAACCGAGATAAAGAAATCAAAAAGCTA



[View online »](#)

AATGAAGAAATCGAACGCTTGAAGAATAAAATAGCAGATTCAAACAGGCTCGAGCGACAGCTTGAGGACA
 CAGTGGCGCTTCGCCAAGAGCGTGAGGACTCCACGCAGCGGCTGCGGGGGCTGGAGAAGCAGCACC CGCT
 GGTCCGGCAGGAGAAGGAGGAGCTGCACAAGCAACTGGTTGAAGCCTCAGAGCGGTTGAAATCCCAGGCC
 AAGGAATCAAAGATGCCATCAGCAGCGAAAGCTGGCCCTGCAGGAGTTCTCGGAGCTGAACGAGCGCA
 TGGCAGAGCTCCGTGCCAGAAGCAGAAGGTGTCCCGCAGCTGCGAGACAAGGAGGAGGAGATGGAGGT
 GGCCACGCAGAAGGTGGACGCCATGCGGCAGGAAATGCGGAGAGCTGAGAAGCTCAGGAAAGAGCTGGAA
 GCTCAGCTTGATGATGCTGTTGCTGAGGCCCTCAAGGTGAAGCAAGGAGGCCGGGAGCGGGTGCCACCTT
 GCAAGCAAATGGAAAGCGAGCTGGAGGCCCTCAAGGTGAAGCAAGGAGGCCGGGAGCGGGTGCCACCTT
 AGAGCACCAGCAAGAGATTTCCAAAATCAAATCCGAGCTGGAGAAGAAAGTCTTATTTTATGAAGAGGAA
 TTGGTCAGACGTGAGGCCTCCCATGTGCTAGAAGTAAAAATGTGAAGAAGGAGGTGCATGATTCAGAAA
 GCCACCAGCTGGCCCTGCAGAAAGAAAATCTTGATGTTAAAAGATAAGTTAGAAAAGTCAAAGCGAGAACG
 GCATAACGAGATGGAGGAGGCAGTAGGTACAATAAAAGATAAATACGAACGAGAAAGAGCGATGCTGTTT
 GATGAAAAACAAGAAGCTAACTGCTGAAAATGAAAAGCTCTGTTCCCTTTGGATAAACTCACAGCTCAA
 ATAGACAGCTGGAGGATGAGCTGCAGGATCTGGCAGCCAAGAAGGAGTCAAGTGGCCCACTGGGAAGTCA
 GATTGCGGAAATCATTCACTGAGTGGTCACTGACGAGAAAGATGCCCGGGTTACCTTCAAGCTTTGCTTCC
 AAGATGACCGAAGAGCTCGAGGCTTTGAGGAGTTCTAGTCTGGGGTCAAGAACACTGGACCCGCTGTGGA
 AGGTGCGCCGACGCCAGAAGCTGGACATGTCCGCGCGGCTGGAGCTGCAGTGGCCCTGGAGGCGGAGAT
 CCGGGCCAAGCAGCTTGTCCAGGAGGAGCTCAGGAAGTCAAGGACGCCAACCTCACCTTGGAAAGCAAA
 CTAAGGATTCGAAGCCAAAAACAGAGAATTATTAGAAGAAATGGAAATTTTGAAGAAAAAGATGGAAAG
 AAAAAATCAGAGCAGATACTGGGCTCAAACCTCCAGATTTTCCAGATTCCATTTTGGATTTTCAACAC
 TGCTCCTCTTGACATGACCTGACATTTAGAACCAGCTCAGTGTGAGCAAGAAACACAAGCTCCGAAG
 CCAGAAGCGTCCCGTCGATGTCTGTGGCTGCATCAGAGCAGCAGGAGCCAAAAGCTCACCAGTTCAGCA
 TCAAGTCTTCCAGCCCTACTCAGTGCAGCCACTGCACCTCCCTGATGGTTGGGCTGATCCGGGAGGG
 CTACGCTTGCAGGTTGTGTTCTTTGCTTGCACGTTGCTTGCACAAAGACGGTGCSCCCAGGTTGCCCA
 ATACCTCCCGAGCAGTCCAAGAGGCTCTGGGCGTGGACGTGCAGCGAGGCATCGAACAGCCTACAAAAG
 GCCATGTCAAGGTCCCAAAGCCACGGGGTGAAGAAGGGATGGCAGCGCGCATATGCAGTGTCTGTGA
 CTGCAAGCTTCTCTGTATGATCTGCCTGAAGGAAAAATCCACCCAGCCTGGTGTGATTGCGAGCCAAGTC
 TTGGATCTCAGAGATGACGAGTTTTCCGTGAGCTCAGTCTGGCCTCAGATGTCATTGATGCTACACGCC
 GAGATATCCATGTATATTCAGGGTGACGGCTCTCTCTAGGTGCACCTTCTAAGACCAGCTCGCTGCT
 CATTCTGACAGAAAATGAGAATGAAAAGAGGAAGTGGGTTGGGATTCTAGAAGGACTCCAGTCCATCCTT
 CATAAAAACCGGCTGAGGAATCAGTGTGATGTTCCCTTGGAAAGCCTACGACAGCTCGCTGCCTCTCA
 TCAGGCCATCCTGACAGCTGCCATCGTGGATGCAGACAGGATTGCAAGTGGCCTAGAAGAGGGCTCTA
 TGTATAGAGGTACCCGAGATGTGATCGTCCGTGCCGCTGACTGTAAGAAGGTACACCAGATCGAGCTT
 GCTCCCAGGGAGAAGATTGTAATCCTCCTCTGTGGCCGGAACCACCATGTGCACCTCTATCCGTGGTCTG
 CCCTTGATGGAGCGGAAGGCAGCTTTGACATCAAGCTTCCGGAACCAAAGGCTGCCAGCTCATGGCCAC
 GGCCCACTCAAGAGGAACTCTGGCACCTGCCTGTTTGTGGCCGTGAAACGGCTGATCCTTTGCTATGAG
 ATCCAGAGAACGAAGCCATTCCACAGAAAGTTCATGAGATTGTGGTCCCGCAGCGTGCAGTGCCTGG
 CGGTGCTCAGGGACAGGCTCTGTGTGGGCTACCTTCTGGGTTCTGCCTGCTGAGCATCCAGGGGACGG
 GCAGCCTCTAAACCTGGTAAATCCCAATGACCCCTCGTTGCGTTCCTCTCACAACAGTCTTTTGTATGCC
 CTTTGTGCTGTGGAGCTGAAAAGCGAGGAGTACCTGCTTTGCTTACGCCACATGGGACTGTACGTGGACC
 CGCAAGGCCGGAGGGCACGCGCAGGAGCTCATGTGGCCTGCGGCTCCTGTCGCTGTAGTTGCGAGCCC
 CACCCACGTCACGGTGTACAGCGAGTATGGCGTGGACGCTTTGATGTGCGCACCATGGAGTGGGTGCAG
 ACCATCGGCTGCGGAGGATAAGGCCCTGAACCTCTGAAGGCACCCTCAACCTCTCAACTGCGAGCCTC
 CACGCTTGATCTACTTCAAGAGCAAGTTCTCGGGAGCGGTTCTCAACGTGCCGGACACCTCCGACAACAG
 CAAGAAGCAGATGCTGCGCACAGGAGCAAAAGGCGGTTCTGTTCAAGTCCCAGAGGAAGAGAGACTG
 CAGCAGAGGCGAGAGATGCTTAGAGACCAGAATTGAGATCCAAAATGATATCCAAACCAACCAACTTCA
 ACCAGTGGCCACATGGGCCAGGCGACGGCATGCAGGTGCTCATGGACCTGCCTCTGAGTGTGTGCC
 CCCTCCCAGGAGGAAAGGCCGGCCCGCTCCCAACCTGGCTCGCCAGCCTCCATCCAGGAACAAG
 CCCTACATCTCGTGGCCCTCATCAGGTGGATCGGAGCCTAGCGTACTGTGCCTCTGAGAAGTATGTCTG
 ATCCAGACCAGGACTTTGACAAAGAGCCTGATTCGGACTCCACCAAACTCAACTCCATCGAATAGCTC
 CAACCCAGCGGCCACCCAGGCCAACTCCCCCACAGGAGCCAGCTCCCCCTCGAAGGCTGGAGCAG
 CCGGCTGTGACACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG213627 representing NM_006035
 Red=Cloning site Green=Tags(s)

MSAKVRLKKLEQLLLDGPWRNESALSVETLLDVLVCLYTECSHSALRRDKYVAEFLEWAKPFTQLVKEMQ
 LHREDFEIIKVIIGRGAFFGEVAVVKMKNTERIYAMKILNKWEMLKRAETACFREERDVLVNGDCQWITALH
 YAFQDENHLVYMDYYVGGDLLTLLSKFEDKLPEDMARFYIGEMVLAIDSIHQLHYVHRDIKPDNVLDDV
 NGHIRLADFGSCLKMNDGTQVSSVAVGTPDYISPEILQAMEDGMGKYGPECDWWSLGVCMYEMLYGETP
 FYAESLVETYGKIMNHEERFQPPSHVTDVSEEAKDLIQRLICSRERRLQNGIEDFKKHAFFEGLNWI
 RNLEAPYIPDVSSPDTSNFDVDDDLNTEILPPGSHTGFSGLHLPFIFGFTTTEFCFSDRGLKSIMQ
 SNTLTKDEDEVQRDLHSLQMEAYERRIRRLQEKELEL SRKLQESTQTQVQSLHGSSRALSNSNRDKEIKKL
 NEEIERLNKNIADSNRLERQLEDTVLRQEREDSTQRLRGLKQHRVVRQEKELHKQLVEASERLKSQA
 KELKDAHQQRLALQEFSELNERMAELRAQKQKVSRLRDKKEEMEVATQKVDAMRQEMRRAEKLRKELE
 AQLDDAVAEASKERKLRHSENFCKQMESELEALKVKQGGRGAGATLEHQEISKIKSELEKVLVFEYEE
 LVRREASHVLEKVNKKEVHDSESHQLALQKEILMLKDKLEKSKRERHNEMEEAVGTIKDKYERERAMLF
 DENKKLTAENEKLCFVVDKLTQNRQLEDELQDLAAKKESVAHWAEQIAEIIQWVSDEKDARGYLQALAS
 KMTEELEALRSSSLGSRITDPLWKVRRSQKLDMSARLELQSALEAEIRAKQLVQEELRKVKDANLTLESK
 LKDSEAKNRELEEMEILKKKMEEFKFRADTGLKLPDFQDSIFEFNTAPLAHDLTFRTSSASEQETQAPK
 PEASPSMSVAASEQQEPKAHQFSIKSFSPTQCSHCTSLMVLIRQGYACEVCSFACHVSCDKGAPQVCP
 IPPEQSKRPLGVDVQRGIGTAYKGHVKVPKPTGVKKGWQRAYAVVCDCKLFLYDLPEGKSTQPGVIASQV
 LDLRDDEFVSSVLAADVIHATRRDIPCFRVTASLLGAPSKTSLLILTENENEKRKWWGILEGLQSIL
 HKNRLRNQVVHVPLEAYDSSLPLIKAILTAAIVDADRIAVGLEEGLYVIEVTRDVIIVRAADCKKVHQIEL
 APREKIVILLCGRNHVHLYPWSSLDGAEGSFDIKLPETKGCQLMATATLKRNSGTCLFVAVKRLILCYE
 IQRTPKPFHRKFNEIVAPGSVQCLAVLRDRLCVGYPSGFCLLSIQGDGQPLNLVNPNPDLAFLSQQSFDAL
 CAVELESEEYLLCFSHMGLYVDPQRRARAQELMWAAPVACSCSPHTVTVYSEYGVDFVDRVTRMEWVQ
 TIGLRRIRPLNSEGLNLLNCEPRLIYFKSKFSGAVLNVPDTSNKKQMLRTRSKRRFVFKVPEEERL
 QQRREMLRDEPLRSKMI SNPTNFNHVAHMGPGDGMQVLMPLSAVPPSQEERPGAPTNLARQPPSRNK
 PYISWPSGGSEPSVTVPLRSMDDPDQDFDKEPDSSTKHSTPSNSSNPSGPPSPNSPHRSQPLPLEGLEQ
 PACDT

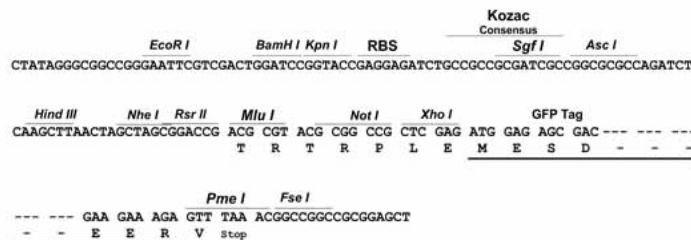
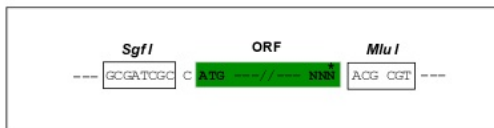
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

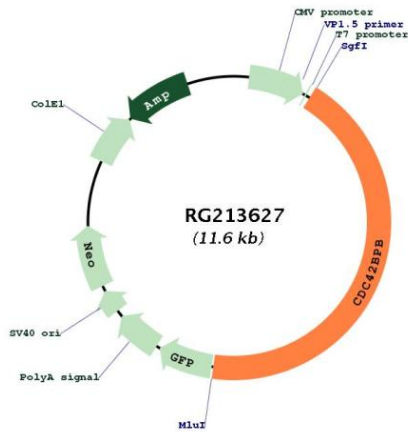
Cloning sites used for ORF Shuttling:



ACCN:	NM_006035
ORF Size:	5133 bp
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).
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:	NM_006035.2 , NP_006026.2

RefSeq Size:	6782 bp
RefSeq ORF:	5136 bp
Locus ID:	9578
UniProt ID:	<u>Q9Y5S2</u>
Cytogenetics:	14q32.32
Domains:	PBD, pkinase, S_TK_X, CNH, TyrKc, PH, DAG_PE-bind, S_TKc, M
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	This gene encodes a member of the serine/threonine protein kinase family. The encoded protein contains a Cdc42/Rac-binding p21 binding domain resembling that of PAK kinase. The kinase domain of this protein is most closely related to that of myotonic dystrophy kinase-related ROK. Studies of the similar gene in rat suggested that this kinase may act as a downstream effector of Cdc42 in cytoskeletal reorganization. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG213627