

Product datasheet for **RG215876**

CNTRL (NM_007018) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	CNTRL
Synonyms:	bA165P4.1; CEP1; CEP110; FAN
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG215876 representing NM_007018
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGAAGAAAGGTTCTCAACAAAAATATTCTCAAAGCAAAGATACCATCATCTCACTCTCCTATCC
CATCATCTATGTCCAATATGAGATCTAGGTCACCTTTGATTGGATCAGAGACTCTACCTTTTCA
TTCTGGAGGACAGTGGTGTGAGCAAGTTGAGATTGCAGATGAAAACATATGCTTTTGGACTATCAAGAC
CATAAAGGAGCTGATTCACATGCAGGAGTTAGATATATTACAGAGGCCCTCATTAAAAAACTTACTAAAC
AGGATAATTTGGCTTTGATAAAATCTCTGAACCTTTCACCTTTCTAAAGACGGTGGCAAGAAATTTAAGTA
TATTGAGAATTTGGAAAAATGTGTTAACTTGAAGTACTGAATCTCAGCTATAATCTAATAGGGAAGATT
GAAAAGTTGGACAAGCTGTTAAATACGTGAACCTCACTTATCATATAACAAATCAGCAAAATTTGAAG
GCATAGAAAATATGTGAATCTGCAAAAGCTTAACCTTGAGGAAATGAAATTGAGCATATTCAGTATG
GTTAGGGAAGAAAGTTAAATCTTTGCGAGTCCTCAATTTGAAAGGCAACAAGATATCATCGCTCCAAGAT
ATAAGCAAGTTGAAACCGCTTCAAGATTTGATTCTCTGATCCTAGTTGAAAATCCAGTTGTGACCCCTTC
CTCATTACCTCCAGTTTACCATTTTCCACCTCCGTTTCATTGGAAGTTTGAAGGTCAGCCAGTAACCCAC
TCAGGATAGACAGGAGGCTTTTGAAGATTCAGTTTGAAGAGGTAGAAAGACTGGAAGAGACCTAGAA
AAAAAGATGATAGAACTGAAGAGCTTAAGAGCAAAACAAACAGGTTCTTGAGGAAATTTAAAAATCAAG
ATAAATTTGAATAAATCATTAAAGAGGAGGCCATGTTACAGAAACAGAGCTGTGAGGAACTCAAGAGTGA
CTTAACACAAAAAATGAATTGCTAAACAGAAGACCATAGAATTAACACGAGCATGTCAGAAGCAATAT
GAGCTGGAACAGGAATTTGGCTTTTATAAAATTTGATGCTAAATTTGAGCCACTAAATTTATTCATCAG
AGTATGCTGAAATTTGATAAAGCCCCAGATGAAAGCCCTTACATTGGCAATCCAGATACAAGAGAAATAT
GTTTGCCACAGAGAGTTATATTATTGACAGTGCTCAGGCAGTACAGATCAAGAAGATGGAGCCAGATGAA
CAACTTAGAAATGATCAGTGAACCTTGAGAGGCCACACACCACTGGACACGCAACTGGAAGACAAAGAAA
AAAAATAAGTGACGACAACTCGACTATCAGAACTGCATGATGAAATAGAAAAGGCAGAACAAACAAAT
TTTGAGAGCTACTGAAGAATTTAAACAACTGGAAGAAGCTATACAATAAAAAAGATTTCAGAAGCAGGG
AAAGACCTTCTTTACAAGCAGTTGAGTGGTAGACTACAACCTGTAAATAAATTACGCCAGGAAGCTCTGG



ATCTAGAACTGCAGATGAAAAAGCAAAAGCAGGAAATTGCCGAAAAGCAGAAGGAGATTAAGGACCTGCA
AATAGCCATAGATAGCCTGGATTCCAAAGACCCAAAACATTCCCATATGAAGGCTCAAAAGAGCGGTAAA
GAACAACAGCTTGACATTATGAACAAGCAGTACCAACAACCTGAAAGTCGTTTGGATGAGATACTTTCTA
GAATTGCTAAGGAAACGGAAGAGATTAAGGACCTTGAAGAACAGCTTACTGAAGGCCAGATAGCAGCAAA
TGAAGCCCTGAAGAAGGATTTAGAAGGTGTTATCAGTGGGTTGCAAGAATACCTGGGGACCATTAAGGC
CAGGCAACTCAGGCCCAGAATGAGTGCAGGAAGCTGCGGGATGAGAAAGAGACATTGTTGCAGAGATTGA
CAGAAGTCGAGCAGGAGAGAGACCAGCTGGAATAGTTGCCATGGATGCAGAAAATATGAGGAAGGAGCT
TGCAGAGCTAGAAAGTGCCCTCCAAGAGCAGCATGAGGTGAATGCATCTTTCAGCAGACCCAGGGAGAT
CTCAGTGCCTATGAAGCTGAGCTAGAGGCTCGGCTAAACCTAAGGGATGCTGAAGCCAACAGCTCAAGG
AAGAGTTGGAAAAAGTAACAAGACTTACCCAGTTAGAACAATCAGCCCTCAAGCAGAACTTGAGAAGGA
AAGGCAAGCCCTCAAGAATGCCCTTGGAAGGCCAGTTCTCAGAAGAAAAGGAGCAAGAGAACAGTGA
CTCCATGCAAAAACCTTAAACACTTGCAAGGATGACAATAATCTGTTAAAACAGCAACTTAAAGATTTCCAGA
ATCACCTTAACCATGTGGTTGATGGTTTGGTTCGTCCAGAAGAAGTGGCAGCTCGTGTGGATGAGCTAAG
AAGAAAACGAAATTAGGAAGTGGGAAAATGAACATCCATAGTCCTTCAGATGTCTTAGGAAAAAGTCTT
GCTGATTTACAGAAACAATTCAGTGAAATTCCTGCACGCTCCAAGTGGGAAAGAGATGAAGCACAAGTTA
GAGAGAGAAAACCTCAAGAAGAAATGGCTCTGCAGCAAGAGAAAACCTGGCAACTGGACAAGAAGATTTCAG
GCAGGCCTGTGAGAGAGCCCTGGAAGCAAGAATGAATTTTGATAAGAGGCAACATGAAGCAAGAATCCAG
CAATGGGAGATGAAATTCACATTTTGCAAGAAAATCTAAAAAGTATGGAGGAAATCCAAGGCCCTACAG
ATCTCCAACCTTCAGGAAGCTGATGAAGAGAAGGAGAGAATTCCTGGCCCACTCCGAGAGTTAGAGAAAA
GAAGAAACTTGAAGATGCCAAATCTCAGGAGCAAGTTTTTGGTTTATAGATAAAGAACTGAAGAAACTAAAG
AAAGCCGTGGCCACCTCTGATAAGCTAGCCACAGCTGAGCTCACCATTGCCAAAGACCAGCTGAAGTCCC
TTCATGGAAGTGTATGAAAATTAACCAGGAGCGAGCAGAGGAGTTGCAGGAAGCAGAGAGGTTTCAGCAG
AAAGGCAGCACAAGCAGCCAGAGATCTCACCCGAGCAGAAGCTGAGATCGAATCCTGCAGAAATCTCCTC
AGGCAGAAGGGGGAGCAGTTTCGACTTGAGATGGAGAAAACAGGTGTAGGTACTGGAGCAAACTCACAGG
TCCTAGAAAATTGAGAACTGAATGAGACAATGGAACGCAAAAGGACAGAGATTGCAAGGCTGCAGAAATGT
ACTAGACCTCACTGGAAGTGACAACAAAGGAGGCTTTGAAAATGTTTTAGAAGAAATTGCTGAACCTCGA
CGTGAAGTTTCTTATCAGAATGATTACATAAGCAGCATGGCAGATCCTTTCAAAGACGAGGCTATTGGT
ACTTTATGCCACCACCACCATCATCAAAAGTTTCCAGCCATAGTTCCAGGCCACCAAGGACTCTGGTGT
TGGCCTTAAGTACTCAGCCTCAACTCTGTAGAAAACACGCCCTGGGCAGCAGGATGGGAAGGAAGGC
AGTCAACCTCCCCCTGCCTCAGGATACTGGGTTTATTCTCCATCAGGAGTGGGTTACATAAACTGTTTC
CAAGTAGAGATGCAGACAGTGGAGGAGATAGTCAGGAAGAGAGTGAGCTGGATGACCAAGAAGAACCCCC
ATTTGTGCCTCCTCCTGGATACATGATGTATACTGTGCTTCTGTGTTCTCCTGTACCCCAAGGCATG
GCCCTGTATGCACCACCTCCTCCCTTGCCAAACAATAGCCGACCTCTCACCCCTGGCACTGTTGTTTATG
GCCCACCTCCTGCTGGGGCCCCCATGGTGTATGGGCTCCACCCCACTTCTCCATCCCCCTCATCCC
TATGGGTGTGCTGCATTGCAACGTCCTGAACACCATAACTTAGAGAATGAAGTTTCTAGATTAGAAGAC
ATAATTCAGCATTTAAATCAAAGAACGCGGAAGAAAGGTGGATGAGAGCATCCAAGCGGCACTCGGAGA
AAGAAATGGAAGAACTGCATCATAATATTGATGATCTTTTGCAAGAGAAGAAAAGCTTAGAGTGTGAAGT
AGAAGAATTACATAGAACTGTCCAGAAACGTCAACAGCAAAAGGACTTCATTGATGGAATGTTGAGAGT
CTTATGACTGAACTAGAAATAGAAAACTCACTCAAACATCATGAAGATATTGTAGATGAAATGAGTGCA
TTGAGAAGACTCTTCTGAAACGTCGCTCAGAGCTCAGGGAAGCTGACCGACTCCTGGCAGAGGCTGAGAG
TGAACCTTCATGCACTAAAGAAAAGACAAAAATGCTGTTGAAAAGTTCACTGATGCCAAGAGAAGTTTA
TTGCAAACTGAGTCAGATGCTGAGGAATTAGAAGGAGAGCTCAGGAACTGCTGTTAACCTCGTCAAAG
CTGATCAGCAGCTAAGATCGCTCCAGGCTGATGCAAGGATTTGGAGCAGCAGCAAAATCAAGCAAGAAGA
AATCTTGAAAAGAAATAAACAAAATTTAGCAGCAAAAGACTCAGACTTCCAATGTTTAAAGCAAGAAGAAG
GAAAAACTGACAGAAGAGCTTCAGAACTACAGAAAGACATAGAGATGGCAGAACGCAATGAGGATCACC
ACCTGCAGGTCTTAAAGAATCTGAGGTGCTTCTCAGGCCAAAAGAGCCGAGCTGGAAGGCTGAAAAG
CCAGGTGACAAGTCAGCAGCAGGAGATGGCTGTCTTGACAGGCAGTTAGGGCATAAAAAGGAGGAGCTG
CATCTACTCCAAGGAAGCATGGTCCAGGCAAAAGCTGACCTCCAGGAAGCTCTGAGACTGGGAGAGACTG
AAGTAAGTGAAGTGCAATCATTAGGGAAGTAAAACTCTTCTGGAAGAACTGAGTTTTTCAGAAAGG
AGAAGTAAATGTTGAGATTAGTGAAAGAAAACTCACTTACACTTATAAGCAGGAAATGAAAAAGAG
GAAGAAAATCTTCAGGTTGTTTTAAGGCAGATGTCTAAACATAAAACCGAACTAAAGAATATTCTGGACA
TGTTGCAACTTGAAAACCATGAGCTACAAGGTTTGAAGCTACAACATGACCAAGGGTATCTGAATTAGA
GAAGACTCAGGTGGCAGTGCTAGAGGAGAACTGGAGTTAGAGAATTTGCAGCAGATATCCAGCAGCAG
AAAGGGGAAATAGAGTGGCAGAAGCAGCTCCTTGAGAGGGATAAACGAGAAATAGAACGAATGACTGCTG
AGTCCCGAGCTTTACAATCGTGTGTGAGTGTGAGCAAGAAAAGGAAGATCTCCAAGAGAAATGTGA
CATTTGGGAAAAAAGTTGGCACAACCAAAAGGGTTTAGCAGCAGCAGAAGAAAATAGCAAAATGGAG

CAATCAAACCTAGAAAAGTTGGAATTGAATGTCAGAAAACGCAGCAGGAAGTACACCAACTAAACAGAG
ACAAGTTGTCACTGCATAACGACATTTTCAGCAATGCAACAGCAGCTCCAAGAAAAACGAGAAGCAGTAAA
CTCACTGCAGGAGGAAGTAGCTAATGTCCAAGACCATTTGAACCTAGCAAAACAGGACCTGCTTCACACC
ACCAAGCATCAGGATGTGTTGCTCAGTGAGCAGACCCGACTCCAGAAGGACATCAGTGAATGGGCAAATA
GGTTTGAAGACTGTCAGAAAGAAGAGGAGACAAAACAACAACCACTTCAAGTGCTTCAGAATGAGATTGA
AGAAAAACAAGCTCAAACCTAGTCCAACAAGAAATGATGTTTCAGAGACTCCAGAAAGAGAGAGAAAGTGAA
GAAAGCAAATTAGAAACAGTAAAGTGACACTGAAGGAGCAACAGCACCAGCTGGAAAAGGAATTAACAG
ACCAGAAAAGCAAACCTGGACCAAGTGCTCTCAAAGGTGCTGGCAGCTGAAGAGCGTGTTAGGACTCTGCA
GGAAAGAGGAGAGGTGGTGTGAGAGCCTGGAGAAGACACTCTCCCAAACCTAAACGGCAGCTTTTCAGAAAGG
GAGCAGCAATTGGTGGAGAAATCAGGTGAGCTGTTGGCCCTCCAGAAAGAGGCAGATTCTATGAGGGCAG
ACTTCAGCCTTCTGCGGAACCAAGTCTTGACAGAAAGAAAGAAAGCTGAGAAGCAGGTGGCCAGCCTGAA
GGAAGCACTTAAGATCCAGCGAGCCAGCTGGAGAAAAACCTTCTTGAGCAAAAACAGGAGAACAGCTGC
ATACAAAAGGAAATGGCAACAATTGAACTGGTAGCCAGGACAACCATGAGCGGGCCAGGCGCCTGATGA
AGGAGCTCAACCAGATGCAGTATGAGTACACGGAGCTCAAGAAACAGATGGCAAACCAAAAAGATTTGGA
GAGAAGACAAATGGAATCAGTGATGCAATGAGGACACTTAAATCTGAGGTGAAGGATGAAATCAGAACC
AGCTTGAAGAATCTTAATCAGTTTCTTCCAGAACTACCAGCAGATCTAGAAGCTATTTTGGAAGAAACG
AAAACCTAGAAGGAGAATTGGAAGCTTGAAAGAGAACCTTCCATTTACCATGAATGAGGGACCTTTTGA
AGAAAACTGAACCTTTCCCAAGTTCACATAATGGATGAACACTGGCGTGGAGAAGCACTCCGGGAGAAA
CTGCGTCACCGGAAGACCGACTCAAGGCCCACTCCGACACTGTATGTCCAAGCAAGCAGAAGTATTAA
TTAAAGGAAAGCGGCAGACAGAGGGCACTTTACACAGTTTGAGGAGACAAGTAGATGCTTTAGGGGAATT
GGTCACCAGCACCTCTGCAGATTACGCGTCATCAGCCAGTCTGTCTCAGCTGGAGTCTTCCCTCACAGAG
GACTCTCAACTGGACAAAATCAGGAAAAGAAATGCCTCAGCCAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG215876 representing NM_007018

Red=Cloning site Green=Tags(s)

MKKGSQQKIFSKAKIPSSSHSIPSSMSNMRSRSLPLIGSETLPFHSGGQWCEQVEIADENNMLLDYQD
HKGADSHAGVRYITEALIKKLTKQDNLALIKSLNLSLSKDGGKKFKYIENLEKCVKLEVLNLSYNLIGKI
EKLDKLLKRLNL SYNKISKIEGIENMCNLQKLNLAGNEIEHIPVWLKGLKSLRVLNLGNKISSLQD
ISKLKPLQDLISLILVENPVVTLPHYLQFTIFHLRSLESLEGQPVTTQDRQEAERFSL EEVERLERDLE
KKMIETEELKSKQTRFLEEIKNQDKLNLKKEEAMLQKQSCEELKSDLNTKNELLKQKTIELTRACQKQY
ELEQELAFYKIDAKFEPLNYYPSEYAEIDKAPDESPYIGKSRKYRNMFATESYIIDSQAVQIKKMEPDE
QLRNDHMNLRGHTPLDTQLEDKEKKISAAQTRLSELHDEIEKAEQQILRATEEFKQLEEAQLKKISEAG
KDLLYKQLSGRLQLVNKLQAEALDLELQMEKQKQEIAGKQKEIKDLQIAIDSLDSKDPKSHMKAQKSGK
EQQLDIMNKYQQLESRLDEILSRIAKETEEIKDLEEQLTEGQIAANEALKKDLEGVISGLQEYLTGKIG
QATQAQNECRKL RDEKETLLQRLTEVEQERDQLEIVAMDAENMRKELAELESALQEHEVNASLQQTQGD
LSAYEALEARLNL RDAEANQLKEELEKVTRLTQLEQSALQAELEKERQALKNALGKAQFSEEKEQENSE
LHAKLKHLDQDNNLLKQQLKDFQNHNLHVVDGLVRPEEVAARVDELRRKLKLTGEMNIHSPSDVLGKSL
ADLQKQFSEILARSKWERDEAQVRERKLQEEMALQQEKLATQEEFRQACERALEARMNFDKQHEARIQ
QMENEHYLQENLKSMEEIQGLTDLQLQEADDEKERILAQLRELEKKKKLEDAKSQEQQVFGDKELKKL
KAVATSDKLATAELTIAKDLKSLHGTVMKINQERAEELQEAERFSRKAQAARDLTRAEEIELLQNL
RQKGEQFRLEMEKTGVGTGANSQVLEIEKLNETMERQRTIARLQNVLDLTGSDNKGGFENVLEEIAELR
REVSYQNDYISSMADPFKRRGYWYFMPPPSSKVSSSHSSQATKDSGVGLKYSASTPVRKPRPGQQDGKEG
SQPPASGYWVYSPIRSLHLKLFPSRDADSGGDSQEESELDQEEPPFVPPPGYMMYTVLPDGSPVPQGM
ALYAPPPPLPNSRPLTPGTVVYGPPAGAPMVYGGPPPNFSIPFIPMGVLHCNVPEHHNLENEVSRLD
IMQHLKSKKREERWMRASKRQSEKEMEELHHNIDDLQEKKSLECEVEELHRTVQKRQQQKDFIDGNVES
LMTLEIEIKSLKHEDIVDEIECIEKTLKRRSELREADRLAEAESEL SCTKEKTKNAVEKFTDAKRSL
LQTESDAEELERRAQETAVNLVKADQQLRSLQADAKDLEQHKKQEEILKEINKIVAAKDSDFQCLSKKK
EKLTEELQKLQKDIEMAERNEDHHLQVLKESEVLLQAKRAELEKLSQVTSQQQEMAVLDRQLGHKKEEL
HLLQGSVMQAKADLQAEALRLGETEVTEKCNHIREVKSLL EELSFQKGELNVQISERKTQLTLIKQEIKE
EENLQVVL RQMSKHKTTELKNILDMLQLENHELQGLKLQHDQRVSELEKTQVAVLEEKLELENLQQISQQQ
KGEIEWQKQLLERDKREIERMTAESRALQSCVECLSKEKEDLQEKCDIWEKKLAQTKRVLAAAEEENSKME
QSNLEKLELNVRLQQELDQLNRDKLSLHNDISAMQQQLQEKREAVNSLQEELANVQDHLNLAKQDLLHT
TKHQDVLLSEQTRLQKDISWANRFEDCQKEEETKQQQLQVLQNEIEENKLLVQQEMMFQRLQKERESE
ESKLETSKVTLKEQQHLEKELTDQKSKLDQVL SKVLAEEERVRTLQEEERWCESLEKTLSTQTKRQLSER
EQQLVEKSGELLALQKEADSMRADFSLLRNQFLTERKKAQKQVASLKEALKIQRSQLEKNLLEQKQENS
IQKEMATIELVAQDNHERARRLMKELNMQYEYTELKKQMANQKDLERRQMEISDAMRTLKSEVKDEIRT
SLKLNQFLPELPADLEAILERNENLEGELESLKENLPFTMNEGPFEKLNFSQVHIMDEHWRGEALREK
LRHREDRLKAQLRHCMKQAEVL IKGKRQTEGTLHSLRRQVDALGELVTSTADSASSPSLSQLESSLTE
DSQLGQNQEKNASAR

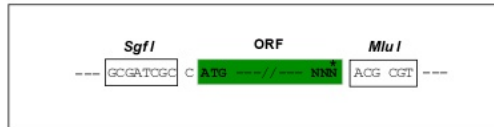
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGGCGCGCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT
 HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAAGTCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---
 T R T R P L E M E S D - - -
 --- GAA GAA AGA GTT TAA ACGCGCGCGCGGAGCT
 - - E E R V Stop

ACCN: NM_007018

ORF Size: 6975 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

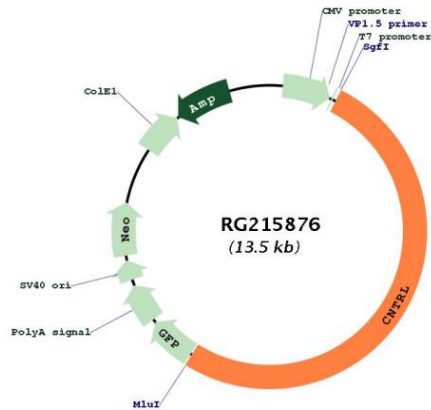
RefSeq: [NM_007018.6](#)

RefSeq Size: 7431 bp
RefSeq ORF: 6978 bp
Locus ID: 11064
UniProt ID: [Q7Z7A1](#)
Cytogenetics: 9q33.2

Protein Families: Druggable Genome

Gene Summary: This gene encodes a centrosomal protein required for the centrosome to function as a microtubule organizing center. The gene product is also associated with centrosome maturation. One version of stem cell myeloproliferative disorder is the result of a reciprocal translocation between chromosomes 8 and 9, with the breakpoint associated with fibroblast growth factor receptor 1 and centrosomal protein 1. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG215876