

Product datasheet for **MG209297**

Cenpb (BC053333) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cenpb (BC053333) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cenpb
Synonyms:	CENP-B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>MG209297 representing BC053333, codon optimized.
Due to the complexity of BC053333, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGCCTAAAAGGAGACAACCTACCTTCAGAGAGAAGTCTAGGATCATTGAGGAGTTGAGGAGAACC
CTGACCTCCGCAAGGGTGAGATCGCTAGACGATTAATATCCCACCCTCCACCCTGAGCACTATACTCAA
AAATAAGCGGGCAATTCTGGCTCCGAGCGCAAGTACGGAGTTGCTAGTACGTGTCGGAAGCAACAAG
CTGAGCCATACGACAACTGGAGGGGCTGTTGATCGCCTGGTTCAACAGATTCGGGCTGCTGGACTTC
CAGTTAAGGGAATTAATTTGAAGGAAAAGGCACCTGCGCATCGCTGAGGAGCTCGGGATGGATGACTTAC
AGCCAGCAACGGTTGGCTGGATAGATTTAGGAGAAGGCACGGCGTGGTGGCTTGCTCAGGCGTGACTAGG
AGTAGGGCACGGTCTAGCGCTCCGCGCGCTCCTGCTGCCCGGGCCGACCCGCAACTGTCCCATCAGAAG
GGTCCGGCGGGTCTACCCCGGGTGGCATACCCGCGAGGAACAGCCTCCGTGAGTGGCAGAGGGGTATGC
ATCTCAAGATGTGTTTTAGCCACCGAGACATCTTTGTGGTACGATTTTCTGTCTGACCAAGCTTCAGGC
CTCTGGGGCGGTGACGGCCCGCCAGACAGGCTACTCAGAGACTGTCTGTCTTGTCTTGTGCCAATGCAG
ACGGGAGCGAGAAGTTGCCTCCACTGGTGGCCGTAAGAGTGCAAACCAAGGGCAGGGCAAGGCGGGCT
CCCATGTGACTACACCGCAATTCAAAAGGGGGTGTACCACGCAGGCTCTCGCTAAGTACTTGAAGCGG
CTCGACACTAGAATGGCAGCTGAGTCCAGGAGAGTCCCTGCTGCTGGCTGGACGCCTGGCAGCCAGAGTT
TGGATACAAGTGGACTCAGACACGTCCAGCTCGCGTTTTTTCCCGCCGGCACGGTTCACCCCTTGAACG
GGGGTGGTTCAACAGGTCAAAGGGCACTACCGCAGGCAATGCTCTTGAAGGCCATGGCCGCACTGGAG
GGCAGGATCCTTCAGGACTCCAGCTGGGATTGGTTGAGGCCCTCACTTTGTGGCAGCAGCCTGGCAGG
CCGTGGAGCCATCTGATATTGCAACATGTTTTCGCGAGGCCGGCTTCGGAGGAGGCCTAACCGGACAAT
TACCACCAGTTTTAAGTCCGAAGGAGAGGAGGAAGAGGAGGAGGAGGAGGAGGAAGGAAGAAGAAGAG
GAGGAAGGTGAAGGAGAGGAAGAGGAGGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
AAGAGGGCGAGGAAGAGGTGGAAGAAGAGGGTGAAGTTGACGACAGTACGAGGAAGAGGAGGAGCAG
CAGTGAGGGCCTGGAGGCAGAGGATTGGGCTCAGGGCGTGGTTCGAGGCAAGCGGTGGGTTCCGGGGCTAT
AGTGTCCAAGAGGAGGCCAGTTCCAACCCTGCACCTTCTCGAGGGCGGCGAGGATTCTGATTCAGATT
CAGATGAGGAAGAGGATGATGAGGAAGAGGATGAAGAGGATGAGGATGAGGAGGATGATGAGGATGGAGA
TGAGGTTCCAGTCCCAGCTTCGGAGAGGGCATGGCATACTTCGCTATGGTGAAGCGCTATCTCACCAGC
TTCCCAATAGATGACCGGGTGCAGTCTCACATCTGCACCTCGAGCACGACCTGGTCCACGTGACTAGGA
AGAACCATGCCCGCAAGCAGGCGTACGCGGGCTGGTTCATCAGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG209297 representing BC053333
 Red=Cloning site Green=Tags(s)

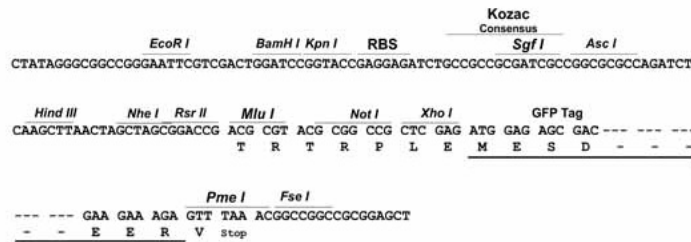
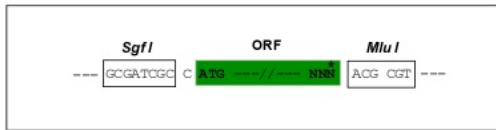
MGPKRRQLTFREKSRIIQEVEENPDLRKGEIARRFNIPPSTLSTILKNKRAILASERKYGVASTCRKTNK
 LSPYDKLEGLLIAWFQQIRAAGLPVKGILKEKALRIAEELGMDDFTASNGWLDLDRFRRHGTVVACSGVTR
 SRARSSAPRAPAAPAGPATVPSESGGGSTPGWHTREEQPPSVAEGYASQDVF SATETSLWYDFLSDQASG
 LWGGDGPARQATQRLSVLLCANADGSEKLPPLVAGKSAKPRAGQGGLPCDYTANSKGGVTTQALAKYLKA
 LDTRMAAESRRVLLLAGRLAAQSLDTSGLRHVQLAF FPPGTVHPLERGVVQVKGHYRQAMLLKAMAAL
 EQDPSGLQLGLVEALHFVAAAWQAVEPSDIATCFREAGFGGGLNATITTSFKSEGESEEEEEEEEEEE
 EEEGEEEEEEEEEGEEEGEVE
 SVQEEAQFPTLHFLEGGEDSDSDSEDEEEDDEEEDDEEEDDEEEDDEEEDDEEEDDEEEDDEEEDDEE
 FPIIDRVQSHILHLEHDLVHVTRKNHARQAGVRGLGHQS

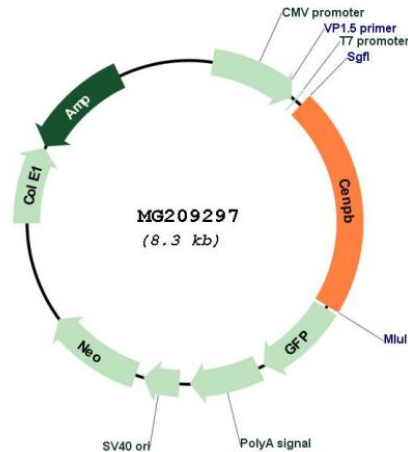
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: BC053333

ORF Size: 1797 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: [BC053333](#), [AAH53333](#)

RefSeq Size: 2809 bp

RefSeq ORF: 1799 bp

Locus ID: 12616

Cytogenetics: 2 63.29 cM

Gene Summary: Interacts with centromeric heterochromatin in chromosomes and binds to a specific 17 bp subset of alphoid satellite DNA, called the CENP-B box. May organize arrays of centromere satellite DNA into a higher-order structure which then directs centromere formation and kinetochore assembly in mammalian chromosomes.[UniProtKB/Swiss-Prot Function]