

Product datasheet for **RG208842**

CENPB (NM_001810) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CENPB (NM_001810) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CENPB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG208842 representing NM_001810
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCCCAAGAGGCGACAGCTGACGTTCCGGGAGAAGTCACGGATCATCCAGGAGGTGGAGGAGAATC
 CGGACCTGCGCAAGGGCGAGATCGCGCGCGCTTCAACATCCCGCGTCCACGCTGAGCAGGATCCTGAA
 GAACAAGCGCGCCATCCTGGCGTCGAGCGCAAGTACGGGGTGGCCTCCACCTGCCGCAAGACCAACAAG
 CTGTCTCCCTACGACAAGCTCGAGGGCTTGCTCATCGCCTGGTTCAGCAGATCCGCGCCGCCGCGCTGC
 CGGTCAAGGGCATCATCCTCAAGGAGAAGGCGCTGCGCATAGCCGAGGAGCTGGGCATGGACGACTTCAC
 CGCCTCCAACGGCTGGCTGGACCGCTTCCGCGGCGCCACGGCGTGGTGTCTGCAGCGCGTGGCCCGC
 GCCCGCGCGCAACGCTGCCCCCGCACCCGCGCGCGCTGCCAGTCCGGCGCGGTGCCCTCGGAGG
 GCAGTGGCGGGAGCACTACTGGTTGGCGCGCTCGGGAGGAGCAGCCGCCGTCGGTGGCCGAGGGCTACGC
 CTCGACGACGTGTTAGCGCCACCGAGACCAGTCTATGTTACGACTTCTGCCCGACAGCGCGCGGGG
 CTGTGCGGAGGCGACGAGCGGCCGCTCAAGCCACCCAGCGCCTGAGCGTCTGCTATGCCCAATGCCG
 ACGGCAGCGAGAAGCTGCCCCCGCTGGTGGCCGCAAGTCGGCCAAGCCCCGCGCAGGCCAAGCCGCGCT
 GCCCTGCGACTACACGCCAACTCCAAGGGTGGTGTACCAACCCAGGCCCTGGCCAAGTACTTGAAGGCC
 TTGGACACCCGAATGGCTGCAGAGTCTCGCCGGTCTGCTGTTGGCCGGCGCTTGGCTGCCAGTCTCT
 TGGACACCTCGGGCTGCGGCATGTGCAGCTGGCCTTCTCCCTCCCGCACCGTGCATCCGCTGGAGAG
 GGGAGTGGTCCAGCAGGTGAAGGGCCACTACGCCAGGCCATGCTGCTCAAGGCCATGGCCGCGCTAGAG
 GGCCAGGATCCCTCAGGCCTGCAGCTGGGTCTCACGGAGGCCCTGCACCTTGTGGCTGCCGCTGGCAGG
 CAGTGGAGCCTTCGACATAGCCGCTGCTTTCGTGAGGCTGGCTTTGGGGTGGCCCTAATGCCACCAT
 CACCATTCCCTCAAGAGTGAGGGAGAGGAAGAGGAGGAGGAGGAAGAAGAGGAGGAGGAAGAGGGT
 GAAGGAGAGGAAGAGGAGGAGGAAGGGAGGAGGAGGAGGAAGGGGGGAAGGAGAGGAATTGGGGG
 AGGAAGAGGAGGTGGAGGAGGAGGTGATGTTGATAGTGATGAAGAAGAGGAGGAAGATGAGGAGAGCTC
 CTCGGAGGGCTTGGAGGCTGAGGACTGGGCCAGGGAGTAGTGGAGGCCGGTGGCAGCTTCGGGGCTTAT
 GGTGCCAGGAGGAAGCCAGTGCCTACTCTGCATTTCTGGAAGGTGGGGAGGACTCTGATTACAGACA
 GTGAGGAAGAGGACGATGAGGAAGAGGATGATGAAGATGAAGACGACGATGATGATGAGGAGGATGGTGA
 TGAGGTGCCTGTACCCAGCTTTGGGAGGCCATGGCTTACTTTGCCATGGTCAAGAGGTACCTGACCTCC
 TTCCCCATTGATGACCGCTGCAGAGCCACATCTCCACTTGAACACGATCTGGTTCATGTGACCAGGA
 AGAACCACGCCAGGCAGCGGGAGTTTCGAGGTCTTGACATCAAAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG208842 representing NM_001810
 Red=Cloning site Green=Tags(s)

MGPKRRLTFREKSRIIQEVEENPDLRKGEIARRFNIPPSTLSTILKNKRAILASERKYGVASTCRKTNK
 LSPYDKLEGLLIAWFQQIRAAGLPVKGIIILKEKALRIAEELGMDDFTASNGWLDLFRRRRHGVVSCSGVAR
 ARARNAAPRTPAAPASPAAVPSESGSGSTTGWRAREEQPPSVAEYASQDVFSATETSLWYDFLPDQAAG
 LCGGDGRPRQATQRLSVLLCANADGSEKLPLVAGKSAKPRAGQAGLPCDYTANSKGGVTTQALAKYLKA
 LDTRMAAESRRVLLLAGRLAAQSLDTSGLRHVQLAFFPPGTVHPLERGVVQVKGHYRQAMLLKAMAAL
 EQDPSGLQLGLTEALHFVAAWQAVEPSDIAACFREAGFGGPNATITSLKSEEEEEEEEEEEEEEG
 EEEEEEEEEEEEEEGEELGEEEEVEEEDVDSDDEEEDEESSSEGLEAEDWAQGVVEAGGSFGAY
 GAQEEAQCP TLHFLEGGEDSDSDSEEDDEEDEDDEDDDEEDGDEVPVPSFGEAMAYFAMVKRYLTS
 FPIDDRVQSHILHLEHDLVHVTRKNHARQAGVRGLGHQS

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001810

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: [NM_001810.6](#)

RefSeq Size: 2856 bp

RefSeq ORF: 1800 bp

Locus ID: 1059

UniProt ID: [P07199](#)

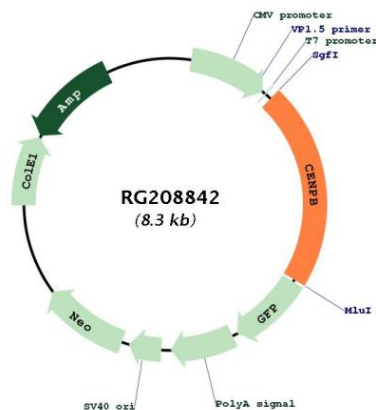
Cytogenetics: 20p13

Protein Families:

Druggable Genome

Gene Summary:

This gene product is a highly conserved protein that facilitates centromere formation. It is a DNA-binding protein that is derived from transposases of the pogo DNA transposon family. It contains a helix-loop-helix DNA binding motif at the N-terminus, and a dimerization domain at the C-terminus. The DNA binding domain recognizes and binds a 17-bp sequence (CENP-B box) in the centromeric alpha satellite DNA. This protein is proposed to play an important role in the assembly of specific centromere structures in interphase nuclei and on mitotic chromosomes. It is also considered a major centromere autoantigen recognized by sera from patients with anti-centromere antibodies. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RG208842