

Product datasheet for **MG201823**

Cbx5 (NM_001076789) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cbx5 (NM_001076789) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Cbx5
Synonyms: 2610029O15Rik; C75991; HP1; Hp1a; Hp1alpha
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201823 representing NM_001076789
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGAAAGAAGACCAAGAGGACAGCCGACAGCTCTTCTTCAGAGGATGAGGAGGAATATGTGGTGGAAA
 AGGTGTTGGACAGGCGCATGGTTAAGGGCAAGTGAATATCTGTTGAAGTGAAAGGCTTTTCTGAGGA
 GCACAATACTGGGAACCTGAGAAGAAGCTGGATTGTCCTGAACATAATTTCTGAGTTTATGAAAAAGTAT
 AAGAAGATGAAGGAGGTGAAAACAATAAGCCCAGGGAGAAATCAGAAGGAAACAAGAGGAAATCCAGTT
 TCTCCAACAGCGCTGATGATATTAATCTAAAAAAGAGAGAGCAAAGCAATGATATCGCTCGGGGCTT
 TGAGAGAGGACTGGAACAGAAAAGATCATCGGAGCAACAGATTCTGCGGTGACTTAATGTTCTTAATG
 AAATGGAAAGACACAGATGAAGCTGACCTGGTTCTTGCAAAAGAAGCTAACGTGAAGTGCCACAGATTG
 TGATAGCATTTTATGAAGAGAGACTGACGTGGCACGCATATCCAGAGGATGCGGAAAAACAAGAAAAAGA
 AAGCGGAAGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201823 representing NM_001076789
 Red=Cloning site Green=Tags(s)

MGKTKRTADSSSEDEEEYVVEKVLDRRMVKQVEYLLKWKGFSEEHNTWEPEKNLDCPELISEFMKKY
 KKMKEGENNPREKSEGNKRKSSFSNSADDIKSKKKREQSNDIARGFERGLEPEKIIIGATDSCGDLMLFM
 KWKDTDEADLVLAKEANVKCPQIVIAFYEERLTHAYPEDAENKEKESAKS

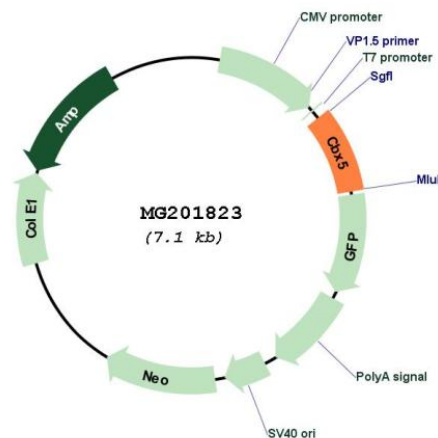
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001076789

ORF Size: 576 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_001076789.2](#)

RefSeq Size: 8801 bp

RefSeq ORF: 576 bp

Locus ID: 12419

UniProt ID: [Q61686](#)

Cytogenetics: 15 F3

Gene Summary: Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph). Can interact with lamin-B receptor (LBR). This interaction can contribute to the association of the heterochromatin with the inner nuclear membrane. Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins (By similarity).[UniProtKB/Swiss-Prot Function]