

## Product datasheet for **MG219678**

### **Cbx5 (NM\_007626) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cbx5 (NM\_007626) 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:** >MG219678 representing NM\_007626  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGAAAGAAGACCAAGAGGACAGCCGACAGCTCTTCTTCAGAGGATGAGGAGGAATATGTGGTGGAAA  
 AGGTGTTGGACAGGCGCATGGTTAAGGGCAAGTGAATATCTGTTGAAGTGAAAGGCTTTTCTGAGGA  
 GCACAATACTTGGGAACCTGAGAAGAATTGGATTGTCCTGAACATAATTTCTGAGTTTATGAAAAAGTAT  
 AAGAAGATGAAGGAGGTGAAAACAATAAGCCCAGGGAGAAATCAGAAGGAAACAAGAGGAAATCCAGTT  
 TCTCCAACAGCGCTGATGATATTAATCTAAAAAAGAGAGAGCAAAGCAATGATATCGCTCGGGGCTT  
 TGAGAGAGGACTGGAACAGAAAAGATCATCGGAGCAACAGATTCTGCGGTGACTTAATGTTCTTAATG  
 AAATGGAAAGACACAGATGAAGCTGACCTGGTTCTTGCAAAAGAAGCTAACGTGAAGTGCCACAGATTG  
 TGATAGCATTTTATGAAGAGAGACTGACGTGGCAGCATATCCAGAGGATGCGGAAAAACAAGAAAAAGA  
 AAGCGGAAGAGC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >MG219678 representing NM\_007626  
 Red=Cloning site Green=Tags(s)

MGKTKRTADSSSEDEEEYVVEKVLDRRMVKQVEYLLKWKGFSEHNTWEPEKNLDCPELISEFMKKY  
 KKMKEGENNPKPREKSEGNKRKSSFSNSADDIKSKKKREQSNDIARGFERGLEPEKIIIGATDSCGDLMLFM  
 KWKDTEADLVLAKEANVKCPQIVIAFYEERLTHAYPEDAENKEKESAKS

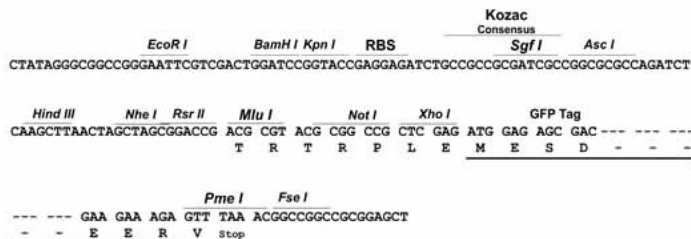
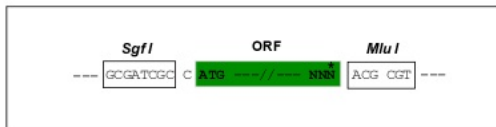
**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI

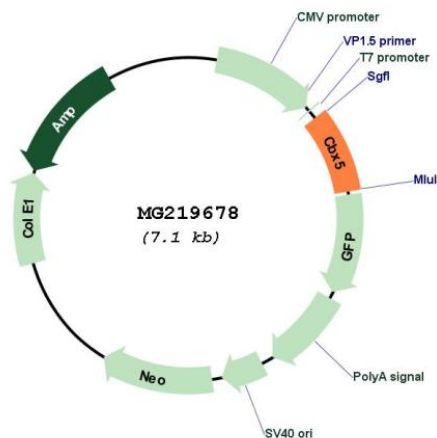


**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



ACCN: NM\_007626  
 ORF Size: 573 bp

<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<p><a href="#">NM_007626.3</a>, <a href="#">NP_031652.1</a></p>
<b>RefSeq Size:</b>	<p>8802 bp</p>
<b>RefSeq ORF:</b>	<p>576 bp</p>
<b>Locus ID:</b>	<p>12419</p>
<b>UniProt ID:</b>	<p><a href="#">Q61686</a></p>
<b>Cytogenetics:</b>	<p>15 F3</p>
<b>Gene Summary:</b>	<p>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]</p>