

## Product datasheet for **MG205143**

### **Pcgf2 (NM\_009545) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Pcgf2 (NM\_009545) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Pcgf2  
**Synonyms:** mel-18; Mel18; Rnf110; Zfp144  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG205143 representing NM\_009545  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCATCGGACCACCGGATTAATAACACGGAGCTGAACCCTCACCTCATGTGTGCCCTCTGTGGGGGCT  
ATTTTATTGATGCCACCACCATTGTGGAATGCTTACATTCCTTCTGCAAAACCTGCATCGTACGCTACTT  
GGAGACCAACAAATACTGCCCATGTGTGACGTCCAGGTCCATAAACTCGACCACTGCTGAGCATCAGA  
TCAGACAAAACCTCCAGGACATTGTCTACAAGTTGGTGCCTGGGCTTTTAAAGATGAAATGAAACGGC  
GACGGGACTTCTATGCAGCATACCCCTGACAGAGGTCCCAACGGCTCCAACGAGGACCGAGGCGAGGT  
CCTGGAACAGGAGAAGGGGGCTCTGGGTGACGACGAGATTGTCACTTTCCATTGAGTTCTACGAAGGC  
GTCAGGGACCGAGAGGAGAAGAAGAACCTCACGGAGAATGGAGATGGGGACAAGGAGAAGACAGGAGTGC  
GATTCCTGCGGTGCCAGCAGCCATGACCGTCATGCACCTGGCAAAGTTCTCCGCAACAAAATGGATGT  
GCCCAGCAAGTACAAGGTGGAGATCCTCTATGAAGATGAGCCCTGAAGGAATACTACACCTTAATGGAC  
ATTGCGTACATCTACCCCTGGCGAAGGAATGGGCTCTCCCCCTCAAGTACCGTGTCCAGCCAGCCTGCA  
AGCGGCTACCCCTGCCACGGTCCCAACCCCTCAGAAGGCACCAACACCAGCGGGGCATCAGAGTGTGA  
GTCAGTCAGCGACAAGGCTCCAGCCCTGCCACCTTCCGGCCACCTCCTCCTTGCCAGCCCTGCC  
ACCCCATCCCATGGCTCTCCAGCTCCACGGCCCCCAGTACCCATCCTACTTCCCCACTCCACCT  
CAACTGCCGCTGGGACCACACAGCTACCAATGGGGCACTTCGAACTGCCTGCAAACGCCATCCTCCAC  
CAGCAGGGGGCGCAAGATGACTGTTAATGGCGCTCCTTGCCCCCT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG205143 representing NM\_009545  
 Red=Cloning site Green=Tags(s)

MHRTRRIKITELNPHLMCALCGGYFIDATTIVECLHSFCKTCIVRYLETNKYCPMCDVQVHKTRPLL SIR  
 SDKTLQDIVYKLVPLFKDEMKRRRDFYAAAYPLTEVPNGSNEDRGEVLEQEKALGDDEIVLSIEFYEG  
 VRDREEKKNLTENGDDKEKTGVRFLRCPAAMTVMHLAKFLRNKMDVPSKYKVEILYEDEPLKEYYTLMD  
 IAYIYPWRRNGPLPLKYRVQPACKRLTLPTVPTPSEGTNTSGASECESVSDKAPSPATLPATSSSLPSPA  
 TPSHGSPSSHGPPATHPTSPTPPSTAAGTTATNGGTSNCLQTPSSTSRRGRKMTVNGAPCPP

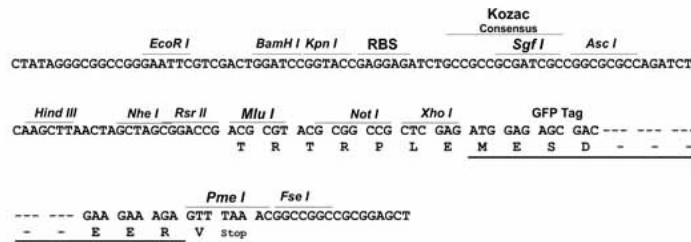
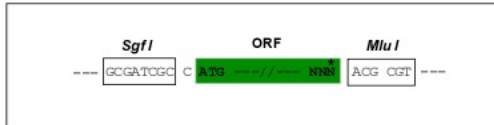
TRTRPLE - GFP Tag - V

**Restriction Sites:**

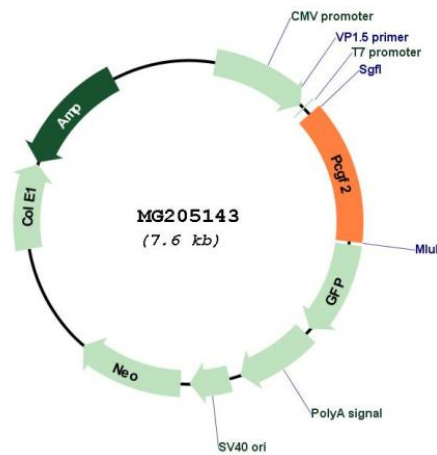
Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** NM\_009545

**ORF Size:** 2749 bp

<b>OTI Disclaimer:</b>	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>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<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>	<a href="#">NM_009545.2</a> , <a href="#">NP_033571.1</a>
<b>RefSeq Size:</b>	1605 bp
<b>RefSeq ORF:</b>	1029 bp
<b>Locus ID:</b>	22658
<b>UniProt ID:</b>	<a href="#">P23798</a>
<b>Cytogenetics:</b>	11 61.06 cM
<b>Gene Summary:</b>	Transcriptional repressor (PubMed:8521824). Binds specifically to the DNA sequence 5'-GACTNGACT-3' (PubMed:8521824). Has tumor suppressor activity (PubMed:8521824). May play a role in control of cell proliferation and/or neural cell development (Probable). Regulates proliferation of early T progenitor cells by maintaining expression of HES1(PubMed:15728456). Also plays a role in antero-posterior specification of the axial skeleton and negative regulation of the self-renewal activity of hematopoietic stem cells (PubMed:8625838, PubMed:15183898). Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility. Within the PRC1-like complex, regulates RNF2 ubiquitin ligase activity (By similarity).[UniProtKB/Swiss-Prot Function]