

## Product datasheet for MR203127

### Pcgf1 (NM\_197992) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pcgf1 (NM_197992) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pcgf1
Synonyms:	2010002K04Rik; AU024121; Nspc1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR203127 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGCTTCGGAACAGCTCCAGTCAGTGTACAAGATGGACCCACTACGGAACGAGGAGGAGGTCCGGG  
TGAAGATCAAAGACCTGAATGAACACATCGTTTGCTGCCTGTGCGCGGGCTACTTCGTGGATGCCACCAC  
CATCACAGAGTGTCTCCACACCTTCTGCAAAAGTTGTATCGTGAAGTACCTGCAAACCAGCAAGTACTGC  
CCCATGTGCAACATCAAGATCCACGAGACGCAGCCGTTGCTCAATCTCAAACCTGGATCGGGTCATGCAGG  
ACATAGTGTATAAGCTAGTGCCAGGCTTGCAAGACAGTGAAGAGAAACGGATTTCGGGAATCTATCAGTC  
CCGAGGCTTAGACAGAGTCTCCAGCCAGTGGTGAAGAGCCAGCCCTGAGCAACCTTGGCTCCCTTC  
AGCAGTTTTGACCACTCTAAAGCCCACTATTATCGATATGATGAACAGCTGAGCCTATGCCTGGAGCGGC  
TGAGTTCTGGCAAAGACAAGAATAAAAAATGTCCTTCAGAACAAAGTATGTTTCGGTGTCTGTGAGAGCTGA  
GGTCCGCCATCTCCGAAGGGTCTGTGTACCGACTAATGCTAAATCCACAGCATGTACAGCTCCTTTTT  
GACAATGAGGTTCTCCAGATCACATGACAATGAAACAGCTATGGCTGTCCCGCTGGTTCGGCAAGCCAT  
CTCCTTTGCTTCTCCAATACAGTGTGAAAGAGAAGAGGAGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR203127 protein sequence  
Red=Cloning site Green=Tags(s)

MRLRNQLQSVYKMDPLRNEEEVRVVIKDLNEHIVCCLCAGYFVDATTITECLHTFCCKSCIVKYLQTSKYC  
 PMCNIKIHETQPLLNLKLDLDRVMQDIVYKLVPLQDSEEKRIREFYQSRGLDRVSQPSGEEPALSNLGLPF  
 SSFDHSAHYRYDEQLSLCLERLSSGKDKNKNVLQNKYVRCVRAEVRHLRRVLCHRLMLNPQHVQLLF  
 DNEVLPDHMTMKQLWLSRWF GKPSPLLLQYSVKEKRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_197992

**ORF Size:** 744 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\\_197992.1](#), [NP\\_932109.1](#)

**RefSeq Size:** 908 bp

**RefSeq ORF:** 744 bp

**Locus ID:** 69837

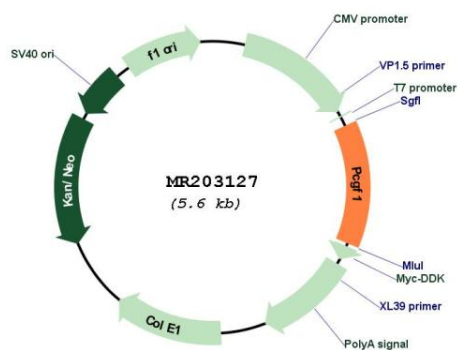
**UniProt ID:** [Q8R023](#)

**Cytogenetics:** 6 35.94 cM

**MW:** 29.2 kDa

**Gene Summary:** Component of the Polycomb group (PcG) multiprotein BCOR complex, a complex required to maintain the transcriptionally repressive state of some genes, such as BCL6 and the cyclin-dependent kinase inhibitor, CDKN1A. Transcriptional repressor that may be targeted to the DNA by BCL6; this transcription repressor activity may be related to PKC signaling pathway. Represses CDKN1A expression by binding to its promoter, and this repression is dependent on the retinoic acid response element (RARE element). Promotes cell cycle progression and enhances cell proliferation as well. May have a positive role in tumor cell growth by down-regulating CDKN1A. 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. Regulates the expression of DPPA4 and NANOG in the NT2 embryonic carcinoma cells.[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MR203127