

## Product datasheet for MR203574

### Setd4 (BC029101) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Setd4 (BC029101) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Setd4  
**Synonyms:** AY037804; C21orf18; ORF21  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR203574 representing BC029101  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCAGAGACGAAGAGGAAGAACAGAGAGGGCCAGGAAGAGACGGCGCGGAAGCTCTGGTTCAAGAGCAG  
 TGAATGAGAGCTACAGATCAGAATTTATAGAGCTAAGAAAATGGCTGAAAGAAAGGAAGTTTGAAGACAC  
 AGACTTAGTACCCGCCAGCTTTCCAGGAACAGGAAGAGGGCTGATGAGCAAAGCATCGTTGCAGGAGGGC  
 CAGGTGATGATCTCACTGCCTGAGAGCTGTCTGCTCACCACGGACTGTGATTCGAAGCTCCCTAGGGC  
 CCTACATTAAGAAGTGAAGCCTCCTGTGTCTCCTCTGCTGGCCTTGTTACTTTCTTAGTCTCAGAAAA  
 GCATGCCGGCTGTCGGTCCCTCTGGAAGCTTACCTGGACATCTACCCAAGTCATACACCTGCCCGGTG  
 TGTTTGGAGCCGGAAGTGGTAGATCTTCTCCAGCCCTTAAAGGCGAAGGCGGAAGAGCAGAGAGCCC  
 GAGTGCAGGACCTGTTTACCTCCGCTAGAGGCTTCTTCTACCTGCAGCCTCTGTTTGCAGAGCCTGT  
 GGACAGCGTTTTTCAGCTACCGAGCCTTCTGTGGCCTGGTGCACGGTGAACACCAGGGCTGTGTACCTG  
 AGGTCCAGGAGGCAGGAGTGCCTTCCGCAGAGCCGGACACGTGTGCGCTTGCTCCGTTCTGGACCTGC  
 TGAATCACAGCCACATGTGCAGGTGAGAGGGCGGCATGGAGACAGGTCTGCCGTTACAGAAGCCTGCC  
 ATGTAGGGACAAGGGTTCTGAGTCAAGGATGGAATGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


ACCN: BC029101

ORF Size: 807 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: [BC029101](#)

RefSeq Size: 2360 bp

RefSeq ORF: 809 bp

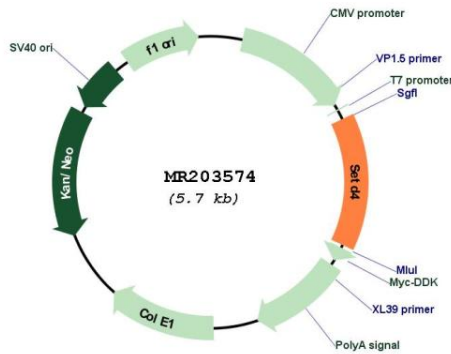
Locus ID: 224440

Cytogenetics: 16 C4

MW: 86.5 kDa

**Gene Summary:** Histone-lysine N-methyltransferase that acts as a regulator of cell proliferation, cell differentiation and inflammatory response (PubMed:31376731, PubMed:31794893, PubMed:33506343). Regulates the inflammatory response by mediating mono- and dimethylation of 'Lys-4' of histone H3 (H3K4me1 and H3K4me2, respectively), leading to activate the transcription of proinflammatory cytokines IL6 and TNF-alpha (PubMed:31376731). Also involved in the regulation of stem cell quiescence by catalyzing the trimethylation of 'Lys-20' of histone H4 (H4K20me3), thereby promoting heterochromatin formation (By similarity). Involved in proliferation, migration, paracrine and myogenic differentiation of bone marrow mesenchymal stem cells (BMSCs) (PubMed:33506343). [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR203574