

Product datasheet for **MG203574**

Setd4 (BC029101) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Setd4 (BC029101) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Setd4
Synonyms:	AY037804; C21orf18; ORF21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG203574 representing BC029101 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGAGACGAAGAGGAAGAACAGAGAGGGCCAGGAAGAGACGGCGGCGAAGCTCTGGTTCAAGAGCAG
TGAATGAGAGCTACAGATCAGAATTTATAGAGCTAAGAAAATGGCTGAAAGAAAGGAAGTTTGAAGACAC
AGACTTAGTACCCGCCAGCTTTCCAGGAACAGGAAGGGCTGATGAGCAAAGCATCGTTGCAGGAGGGC
CAGGTGATGATCTCACTGCCTGAGAGCTGTCTGCTCACCACGGACTGTGATTCGAAGCTCCCTAGGGC
CCTACATTAAGAAGTGAAGCCTCCTGTGTCTCCTCTGCTGGCCTTGTGTACTTTCTTAGTCTCAGAAAA
GCATGCCGGCTGTCGGTCCCTCTGGAAGCTTACCTGGACATCTACCCAAGTCATACACCTGCCCGGTG
TGTTTGGAGCCGGAAGTGGTAGATCTTCTCCAGCCCTTAAAGGCGAAGGCGGAAGAGCAGAGAGCCC
GAGTGCAGGACCTGTTTACCTCCGCTAGAGGCTTCTTCTACCTGCAGCCTCTGTTTGCAGAGCCTGT
GGACAGCGTTTTTACGCTACCGAGCCTTCTGTGGGCTGGTGCACGGTGAACACCAGGGCTGTGTACCTG
AGGTCCAGGAGGCAGGAGTGCCTTTCCGAGAGCCGGACACGTGTGCGCTTGCTCCGTTCTGGACCTGC
TGAATCACAGCCACATGTGCAGGTGAGAGGGCGGCATGGAGACAGGTCTGCCGTTACAGAAGCCTGCC
ATGTAGGGACAAGGGTTCTGAGTCAAGGATGGAATGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG203574 representing BC029101
 Red=Cloning site Green=Tags(s)

MQRRRGRTERARKRRRRSSGSRAVNESYRSEFIELRKWLKERKFEDTDLVPASFPGTGRGLMSKASLQEG
 QVMISLPESCLLTTDTVIRSSLGPYIKKWKPPVSPLLALCTFLVSEKHAGCRSLWKSYL DILPKSYTCPV
 CLEPEVDLLPSPLKAKAEEQRARVQDLFTSARGFFSTLQPLFAEPVDSVFSYRAFLWAWCTVNTRAVYL
 RSRRQECLSAEPDTCALAPFLDLLNHSPhVQVRGRHGDRSCRYSRLPCRDKGSESMEW

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: BC029101

ORF Size: 809 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

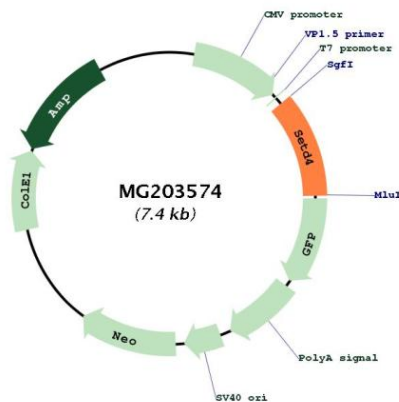
RefSeq ORF: 809 bp

Locus ID: 224440

Cytogenetics: 16 C4

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 MG203574