

## Product datasheet for **MC218142**

### Smyd1 (NM\_001160127) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Smyd1 (NM_001160127) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Smyd1
Synonyms:	4632404M21Rik; Bop; C78565; Zmynd18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >MC218142 representing NM\_001160127  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGACAATAGGCAGCATGGAGAAGTGGAGGTCTTCACTTCCGAGGGCAAAGGCAGAGGTCTGAAGGCTA  
CGAAGGAGTTCTGGGCTGCGGATGTCATCTTTCGGGAGAGGGCTTATTCTGCAGTGGTTTTTGACAGCCT  
CATTAACTTCGTGTGCCACACCTGCTTCAAGAGGCAGGAGAAGCTCCATCGCTGCGGGCAGTGCAAGTTC  
GCCATTACTGCGACCGCACGTGCCAGAAGGATGCTTGGCTGAATCACAAGAACGAGTGCCTGCCATCA  
AGAAATATGGGAAAGTGCCCAACGAGAACATCAGGCTGGCCGCCGCATCATGTGGCGGGTGAGAGAGA  
GGGCACTGGGCTCACAGAGGGCTGCCTGGTGTCCGTGGATGACTTACAGAACCACGTGGAGCACTTTGGG  
GAGGAGGAGCAGAAGGAAGTCCGAGTAGACGTGGACACGTTCTTGCAGTACTGGCCACCACAGAGCCAGC  
AGTTCAGCATGCAGTATATCTCACACATCTTTGGTGTGATCAACTGCAACGGTTTCACTCTCAGTGACCA  
GAGAGGGCTACAGGCAGTAGGTGTGGGCATCTTCCCAACCTGGGCTGGTGAACCATGATTGCTGGCCA  
AACTGCACTGTCAATTTCAACAATGGCAATCATGAGGCAGTGAAATCCATGTTTTACACGCAGATGAGGA  
TTGAGCTCCGGGCCCTGGCAAGATCTCAGAAGGCGAGGAGCTGACTGTGTCTACATAGACTTCTGCA  
CCTCAGTGAGGAGCGCAGGCGGCAGCTGAAGAAACAGTACTACTTTGACTGCTCCTGTGAGCACTGCCAG  
AAGGGGCTGAAGGACGACCTCTTCTGGCAGCGAAGGAAGACCCCAAGCCCTCCAGGAAGTGGTGAAGG  
AGATGATAACAATTCTCAAAGGATACACTGGAAAAAATAGACAAGGCTCGCTCCGAGGGTTTGTATCACGA  
GGTTGTGAAGCTGTGTCGGGAGTGCCTGGAGAAGCAGGAGCCAGTGTTCGCCGACACCAACCTCTACGTG  
CTTCGGCTGCTCAGCATTGCATCAGAGGTCCTCTCCTACCTCCAGGCCTATGAGGAGGCCTCACATTATG  
CCAGGAGGATGGTTGATGGCTACATGAAACTCTACCACCATAACAATGCCCAACTGGGCATGGCTGTGAT  
GAGGGCAGGGCTTACCAACTGGCATGCTGGTACATCGAAGTGGGGCATGGGATGATCTGCAAAGCCTAT  
GCTATTCTCCTGGTGACCCATGGACCCTCCACCCATACCAAAGACTTAGAGGCCATGCGGATGCAGA  
CAGAGATGGAGCTGCGTATGTTCCGCCAAAACGAATTCATGTATCACAAGATGCGAGAGGCTGCCCTGAA  
CAACCAGCCCATGCAGGTCATGGCTGAGCCTAGCAATGAACCAGCCCCGCTCTGTTCCATAAGAAGCAG  
TGA

**ACGGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2423\\_f02.zip](https://cdn.origene.com/chromatograms/ja2423_f02.zip)

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001160127

**Insert Size:** 1473 bp

**OTI Disclaimer:** 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 [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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:** [BC076601](#), [AAH76601](#)

**RefSeq Size:** 3379 bp

**RefSeq ORF:** 1473 bp

**Locus ID:** 12180

**UniProt ID:** [P97443](#)

**Cytogenetics:** 6 32.14 cM

**Gene Summary:** Methylates histone H3 at 'Lys-4' (H3K4me). Acts as a transcriptional repressor. Essential for cardiomyocyte differentiation and cardiac morphogenesis.[UniProtKB/Swiss-Prot Function]  
Transcript Variant: This variant (1) encodes the longer isoform (1).