

## Product datasheet for **MC216431**

### **Smyd1 (NM\_009762) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Smyd1 (NM_009762) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Smyd1
Synonyms:	4632404M21Rik; Bop; C78565; Zmynd18
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC216431 representing NM\_009762  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACAATAGGCAGCATGGAGAAGTGGAGGTCTTCACTTCCGAGGGCAAAGGCAGAGGTCTGAAGGCTA  
 CGAAGGAGTTCTGGGCTGCGGATGTCATCTTTCGGAGAGGGCTTATTCTGCAGTGGTTTTTGACAGCCT  
 CATTAACTTCGTGTGCCACACCTGCTTCAAGAGGCAGGAGAAGCTCCATCGCTGCGGGCAGTGCAAGTTC  
 GCCATTACTGCGACCGCACGTGCCAGAAGGATGCTTGGCTGAATCACAAGAACGAGTGCCTGCCATCA  
 AGAAATATGGGAAAGTGCCCAACGAGAACATCAGGCTGGCCGCCGCATCATGTGGCGGGTGAGAGAGA  
 GGGCACTGGGCTCACAGAGGGCTGCCTGGTGTCCGTGGATGACTTACAGAACCACGTGGAGCACTTTGGG  
 GAGGAGGAGCAGAAGGAAGTCCGAGTAGACGTGGACACGTTCTTGCAGTACTGGCCACCACAGAGCCAGC  
 AGTTCAGCATGCAGTATATCTCACACATCTTGGTGTGATCAACTGCAACGGTTTCACTCTCAGTGACCA  
 GAGAGGGCTACAGGCAGTAGGTGTGGGCATCTTCCCAACCTGGGCTGGTGAACCATGATTGCTGGCCA  
 AACTGCACTGTCAATTTCAACAATGGCAAGATTGAGCTCCGGGCCCTGGGCAAGATCTCAGAAGGCGAGG  
 AGCTGACTGTGTCTACATAGACTTCTGCACCTCAGTGAGGAGCGCAGGCGGCAGCTGAAGAAACAGTA  
 CTACTTTGACTGCTCCTGTGAGCACTGCCAGAAGGGGCTGAAGGACGACCTTCTCCTGGCAGCGAAGGAA  
 GACCCCAAGCCCTCCAGGAAGTGGTGAAGGAGATGATACAATTTCTCAAAGGATACACTGGAAAAATAG  
 ACAAGGCTCGCTCCGAGGGTTTGTATCACGAGGTTGTGAAGCTGTGTCCGGAGTGCCTGGAGAAGCAGGA  
 GCCAGTGTTCGCCGACACCAACCTCTACGTGCTTCGGCTGCTCAGCATTGCATCAGAGGTCTCTCCTAC  
 CTCCAGGCCTATGAGGAGCCTCACATTATGCCAGGAGGATGGTTGATGGCTACATGAAACTCTACCACC  
 ATAACAATGCCCAACTGGGCATGGCTGTGATGAGGGCAGGGCTTACCAACTGGCATGTGCTGCATCGA  
 AGTGGGGCATGGGATGATCTGCAAAGCCTATGCTATTCTCCTGGTGACCCATGGACCCTCCACCCCTATC  
 ACCAAAGACTTAGAGCCATGCGGATGCAGACAGAGATGGAGCTGCGTATGTTCCGCCAAAACGAATTCA  
 TGTATACAAGATGCGAGAGGCTGCCCTGAACAACAGCCATGCAGGTGATGGCTGAGCCTAGCAATGA  
 ACCAGCCCCGCTCTGTTCCATAAGAAGCAGTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_009762
- Insert Size:** 1434 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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\\_009762.2](#), [NP\\_033892.2](#)

RefSeq Size: 3340 bp

RefSeq ORF: 1434 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 (2) lacks an in-frame exon in the CDS, as compared to variant 1. The resulting isoform (2) lacks an internal segment, as compared to isoform 1. CCDS Note: The coding region has been updated to extend the N-terminus to one that is supported by available conservation data.