

Product datasheet for **MG207844**

Smyd1 (BC076601) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smyd1 (BC076601) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Smyd1
Synonyms:	4632404M21Rik, Zmynd18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG207844 representing BC076601
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACAATAGGCAGCATGGAGAAGCTGGAGGTCTTCACTTCCGAGGGCAAAGGCAGAGGTCTGAAGGCTA
 CGAAGGAGTTCTGGGCTGCGGATGTCATCTTTCGGGAGAGGGCTTATTCTGCAGTGGTTTTTGACAGCCT
 CATTAACTTCGTGTGCCACACCTGCTTCAAGAGGCAGGAGAAGCTCCATCGCTGCGGGCAGTGCAAGTTC
 GCCATTACTGCGACCGCACGTGCCAGAAGGATGCTTGGCTGAATCACAAGAACGAGTGCCTGCCATCA
 AGAAATATGGGAAAGTGCCCAACGAGAACATCAGGCTGGCCGCCGCATCATGTGGCGGGTGAGAGAGA
 GGGCACTGGGCTCACAGAGGGCTGCCTGGTGTCCGTGGATGACTTACAGAACCACGTGGAGCACTTTGGG
 GAGGAGGAGCAGAAGGAAGTCCGAGTAGACGTGGACACGTTCTTGCAGTACTGGCCACCACAGAGCCAGC
 AGTTCAGCATGCAGTATATCTCACACATCTTTGGTGTGATCAACTGCAACGGTTTCACTCTCAGTGACCA
 GAGAGGGCTACAGGCAGTAGGTGTGGGCATCTTCCCAACTGGGCTGGTGAACCATGATTGCTGGCCA
 AACTGCACTGTCAATTTCAACAATGGCAATCATGAGGCAGTGAAATCCATGTTTTCACACGCAGATGAGGA
 TTGAGCTCCGGGCCCTGGCAAGATCTCAGAAGGCGAGGAGCTGACTGTGTCTACATAGACTTCTGCA
 CCTCAGTGAGGAGCGCAGGCGGCAGCTGAAGAAACAGTACTACTTTGACTGCTCCTGTGAGCACTGCCAG
 AAGGGGCTGAAGGACGACCTCTTCTGGCAGCGAAGGAAGACCCCAAGCCCTCCAGGAAGTGGTGAAGG
 AGATGATAACAATTCTCAAAGGATACACTGGAAAAAATAGACAAGGCTCGCTCCGAGGGTTTGTATCACGA
 GGTTGTGAAGCTGTGTCGGGAGTGCCTGGAGAAGCAGGAGCCAGTGTTCGCCACACCAACCTCTACGTG
 CTTCCGGCTGCTCAGCATTGCATCAGAGGTCCTCTCCTACCTCCAGGCCTATGAGGAGGCCTCACATTATG
 CCAGGAGGATGGTTGATGGCTACATGAACTCTACCACCATAACAATGCCCAACTGGGCATGGCTGTGAT
 GAGGGCAGGGCTTACCAACTGGCATGCTGGTACATCGAAGTGGGGCATGGGATGATCTGCAAAGCCTAT
 GCTATTCTCCTGGTGACCCATGGACCCTCCACCCATACCAAAGACTTAGAGGCCATGCGGATGCAGA
 CAGAGATGGAGCTGCGTATGTTCCGCCAAAACGAATTCATGTATCACAAGATGCGAGAGGCTGCCCTGAA
 CAACCAGCCCATGCAGGTCATGGCTGAGCCTAGCAATGAACCAGCCCCGCTCTGTTCCATAAGAAGCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG207844 representing BC076601
 Red=Cloning site Green=Tags(s)

MTIGSMENVEVFTSEKGRGLKATKEFWAADVIFAERAYSAVVFDLSLINFVCHTCFKRQEKLHRCGQCKF
 AHYCDRTCQKDAWLNHKNECAAIKKYGKVPNENIRLAARIMWRVEREGTGLTEGCLVSVDDLQNHVEHFG
 EEEQKELRVDVDTFLQYWPPQSQQFSMQYISHIFGVINCNGFTLSDQRGLQAVGVGIFPNLGLVNHDCWP
 NCTVIFNNGNHEAVKSMFHTQMRIELRALGKISEGEELTVSYIDFLHLSEERRRQLKKQYVFDCSCEHCQ
 KGLKDDLFLAAKEDPKPSQEVVKEMIQFSKDTLEKIDKARSEGLYHEVVKLCRECLEKQEPVFADTNLYV
 LRLLSIASEVLSYLQAYEEASHYARRMVDGYMKLYHHNNAQLGMVVRAGLTNWHAGHIEVGHGMICKAY
 AILLVTHGPSHPITKDLEAMRMQTEMELRMFRQNEFMYHKMREAALNNQPMQVMAEPSNEPAPALFHKKQ

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: BC076601

ORF Size: 1472 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 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](#)

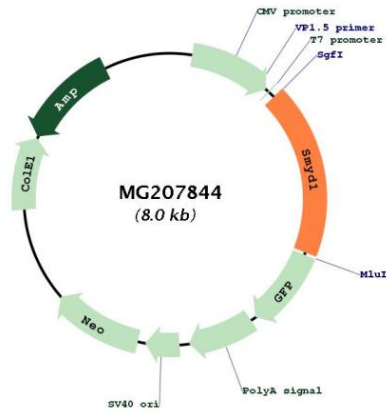
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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: [BC076601](#), [AAH76601](#)
 RefSeq Size: 3357 bp
 RefSeq ORF: 1472 bp
 Locus ID: 12180
 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]

Product images:



Circular map for MG207844