

Product datasheet for **MR221575**

Smyd1 (NM_009762) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smyd1 (NM_009762) Mouse Tagged ORF Clone
Tag:	Myc-DDK
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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ORF Nucleotide Sequence:

>MR221575 representing NM_009762
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACAATAGGCAGCATGGAGAAGTGGAGGTCTTCACTTCCGAGGGCAAAGGCAGAGGTCTGAAGGCTA
 CGAAGGAGTTCTGGGCTGCGGATGTCATCTTTCGGGAGAGGGCTTATTCTGCAGTGGTTTTTGCAGCCT
 CATTAACTTCGTGTGCCACACCTGCTTCAAGAGGCAGGAGAAGCTCCATCGCTGCGGGCAGTGCAAGTTC
 GCCCATTACTGCGACCGCACGTGCCAGAAGGATGCTTGGCTGAATCACAAGAACGAGTGCCTGCCATCA
 AGAAATATGGGAAAGTGCCAACGAGAACATCAGGCTGGCCGCCCATCATGTGGCGGGTGAGAGAGA
 GGGCACTGGGCTCACAGAGGGCTGCCTGGTGTCCGTGGATGACTTACAGAACCACGTGGAGCACTTTGGG
 GAGGAGGAGCAGAAGGAAGTCCGAGTAGACGTGGACACGTTCTTGCAGTACTGGCCACCACAGAGCCAGC
 AGTTCAGCATGCAGTATATCTCACACATCTTGGTGTGATCAACTGCAACGGTTTCACTCTCAGTGACCA
 GAGAGGGCTACAGGCAGTAGGTGTGGGCATCTTCCCAACCTGGGCTGGTGAACCATGATTGCTGGCCA
 AACTGCACTGTCAATTTCAACAATGGCAAGATTGAGCTCCGGGCCCTGGGCAAGATCTCAGAAGGCGAGG
 AGCTGACTGTGTCTACATAGACTTCTGCACCTCAGTGAGGAGCGCAGGCGGCAGCTGAAGAAACAGTA
 CTACTTTGACTGCTCCTGTGAGCACTGCCAGAAGGGGCTGAAGGACGACCTTCTCCTGGCAGCGAAGGAA
 GACCCCAAGCCCTCCAGGAAGTGGTGAAGGAGATGATACAATTTCTCAAAGGATACACTGGAAAAATAG
 ACAAGGCTCGCTCCGAGGGTTTGTATCACGAGGTTGTGAAGTGTGTCCGGAGTGCCTGGAGAAGCAGGA
 GCCAGTGTTCGCCGACACCAACCTCTACGTGCTTCGGCTGCTCAGCATTGCATCAGAGGCTCTCCTAC
 CTCCAGGCCTATGAGGAGCCTCACATTATGCCAGGAGGATGGTGTGATGGCTACATGAAACTCTACCACC
 ATAAACAATGCCCAACTGGGCATGGCTGTGATGAGGGCAGGGCTTACCAACTGGCATGCTGGTCCATCGA
 AGTGGGGCATGGGATGATCTGCAAAGCCTATGCTATTCTCCTGGTGACCCATGGACCCCTCCACCCTATC
 ACCAAAGACTTAGAGGCCATGCGGATGCAGACAGAGATGGAGCTGCGTATGTTCCGCCAAAACGAATTCA
 TGTATACAAGATGCGAGAGGCTGCCCTGAACAACCAGCCATGCAGGTGATGGCTGAGCCTAGCAATGA
 ACCAGCCCCGCTCTGTTCCATAAGAAGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR221575 representing NM_009762
 Red=Cloning site Green=Tags(s)

MTIGSMENVEVFTSEGKGRGLKATKEFWAADVIFAERAYSAVVFDLINFVCHTCFKRQEKLRHRCGQCKF
 AHYCDRTCQKDAWLNHKNECAAIAIKYKVPNENIRLAARIMWRVEREGTGLTEGCLVSVDDLQNHVEHFG
 EEEQKELRVDVDTFLQYWPQSQQFSMQYISHIFGVINCNGFTLSDQRGLQAVGVGIFPNLGLVNHDCWP
 NCTVIFNNGKIELRALGKISEGEELTVSYIDFLHLSEERRRQLKKQYFFDCSEHCQGLKDDLFLAAKE
 DPKPSQEVVKEMIQFSKDTLEKIDKARSEGLYHEVVKLCRECLEKQEPVFAADTNLYVLRLLSIASEVLSY
 LQAYEEASHYARRMVDGYMKLYHHNNAQLGMVVRAGLTNWHAGHIEVGHMICKAYAILLVTHGPSHPI
 TKDLEAMRMQTEMLRMFRQNEFMYHKMREALNNQPMQVMAEPSNEPAPALFHKKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja1586_a08.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_009762

ORF Size: 1431 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: [NM_009762.2](#), [NP_033892.2](#)
RefSeq Size: 3340 bp

RefSeq ORF: 1434 bp

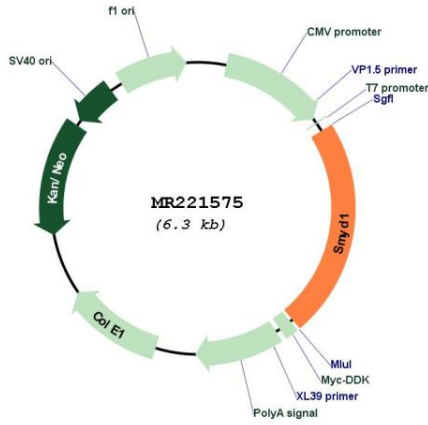
Locus ID: 12180

UniProt ID: [P97443](#)
Cytogenetics: 6 32.14 cM

MW: 55.4 kDa

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 MR221575