

## Product datasheet for **MG206911**

### Smyd2 (NM\_026796) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Smyd2 (NM_026796) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Smyd2
Synonyms:	1110020E07Rik; 4930402C15; KMT3C; Zmynd14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG206911 representing NM_026796 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGCGCCGAGGCCCGCGGGCCTGGAGCGTCTGTCAGTGCGGGCAAGGGCCGGGGCTCCGCGCGC  
TGCGGCCCTTCCACGTGGGCGACCTCCTCTTCTCCTGCCGGCCTACGCCTGCGTGCTCACCGTGGCGA  
GCGGGGCCACCACTGCGAGTGTCTTCGCCAGGAAAGAAGGATTGTCAAATGTGGACGGTGCAAGCAG  
GCGTTCTACTGCGACGTGGAATGTCAGAAGGAAGACTGGCCCTGCACAAGCTGGAATGCTCCTCCATGG  
TTGTTTTGGGGAGAAGTGAATCCTTCGGAGACTGTGCGGCTCACAGCAAGAATTCTGGCCAAACAGAA  
AATCCACCCAGAGAGGACACCTTCAGAGAAATTGTTGGCTGTGAGGGAGTTTGTAGTCACATCTGGACAAG  
CTAGACAACGAGAAGAAAGATCTCATCCAGAGTGACATCGCCGCTCTCCACCAGTTCTACTCCAAGTACC  
TGGAATTCCTGACCACAGCAGTCTCGTGGTGCTCTTCGCCAGGTGAAGTGAATGGCTTCACTATTGA  
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ACGAGGTGTTACCAGCTACATCGACCTGCTATATCCAACAGAAGACAGGAACGACCGGCTAAGAGACTC  
CTATTTCTTTACCTGTGAGTGCCGGGAGTGTACAACCAAGGATAAGGACAAAGCCAAGGTGGAAGTCCGA  
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GATGAGCTCCGTGTTTGGAGACAGCAATGTGTACATGCTGCACATGATGTACCAGCCATGGCGTCTGC  
CTGTACATGCAGGACTGGGAGGGAGCCCTGAAATACGGGCAGAAGATCATTAAGCCGTACAGTAAGCACT  
ACCCCGTGTACTCCCTCAACGTGGCTTCCATGTGGCTGAAGCTGGGAAGACTGTACATGGGTCTGGAAAA  
CAAAGCGCCGGCGAGAAGGCCCTGAAGAAGGCCATTGCCATCATGGAGGTAGCTCACGGCAAGGACCAT  
CCGTACATCTCTGAAATCAAGCAGGAGATTGAGAGCCAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG206911 representing NM\_026796  
 Red=Cloning site Green=Tags(s)

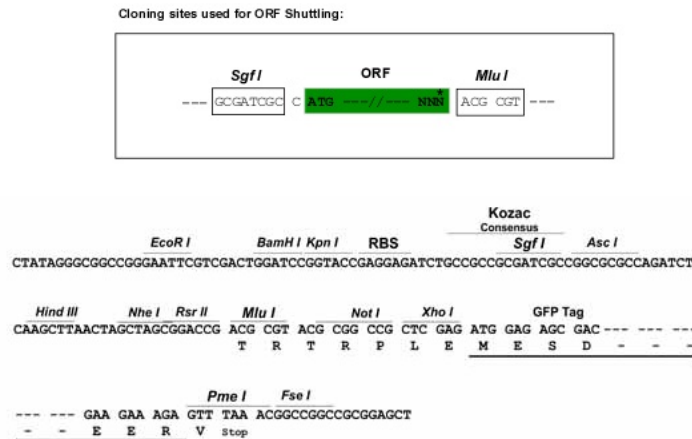
MRAEARGGLERFCSAGKGRGLRALRPFHVGDLLFSCPAYACVLTVGERGHHCECCFARKEGLSKCGRCKQ  
 AFYCDVECQKEDWPLHKLECSSMVVLGENWNPSETVRLTARILAKQKIHPERTPSEKLLAVREFESHLDK  
 LDNEKKDLIQSDIAALHQFYKYLEFPDHSSLVVLFAQVNCNGFTIEDEELSHLGS AIFPDVALMNHSSC  
 PNVIVTYKGT LAEVRVQEIHPGDEVFTSYIDL LLYPTEDRNDRLRDSYFFTCCECRECTTKDKDKAKVEVR  
 KLSPPQAEAIRDMVRYARNVIEEFRAKHYSPELLEICELSQEKMSVFEDSNVYMLHMMYQAMGVC  
 LYMQDWEGALKYQKIKIPYSKHYPVYSLNVASMWLKLGRLYMGLENKAAGEKALKKAI AIMEVAHGKDH  
 PYISEIKQEIESH

TRTRPLE – GFP Tag – V

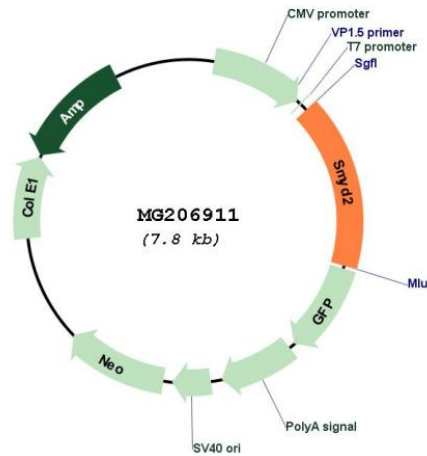
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM\_026796

<b>ORF Size:</b>	1299 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_026796.2</a>
<b>RefSeq Size:</b>	1619 bp
<b>RefSeq ORF:</b>	1302 bp
<b>Locus ID:</b>	226830
<b>UniProt ID:</b>	<a href="#">Q8R5A0</a>
<b>Cytogenetics:</b>	1 H6
<b>Gene Summary:</b>	Protein-lysine N-methyltransferase that methylates both histones and non-histone proteins, including p53/TP53 and RB1. Specifically methylates histone H3 'Lys-4' (H3K4me) and dimethylates histone H3 'Lys-36' (H3K36me2). Shows even higher methyltransferase activity on p53/TP53. Monomethylates 'Lys-370' of p53/TP53, leading to decreased DNA-binding activity and subsequent transcriptional regulation activity of p53/TP53. Monomethylates RB1 at 'Lys-860'. [UniProtKB/Swiss-Prot Function]