

Product datasheet for **RG214307**

SMYD2 (NM_020197) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SMYD2
Synonyms:	HSKM-B; KMT3C; ZMYND14
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG214307 representing NM_020197
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGGCCGAGGGCCTCGGCGGCCTGGAGCGCTTCTGCAGCCCGGGCAAAGGCCGGGGCTGCGGGCTC
TGCAGCCCTTCAGGTGGGGGACTTGTCTCTCTGCCCAGGCCTATGCCTACGTGCTCACGGTCAACGA
GCGGGGCAACCACTGCGAGTACTGCTTACCAGGAAAGGATTGTCCAAATGTGGAAGATGCAAGCAG
GCATTTTACTGCAATGTGGAGTGTGAGAAAGATTGGCCATGCACAAGCTGGAATGTTCTCCATGG
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AATCCACCCAGAGAGAACACCTTCGGAAAAATTGTTAGCTGTGAAGGAGTTTGAATCACATCTGGATAAG
TTAGACAATGAGAAGAAGGATTTGATTGAGTGTGACATAGCTGCTCTCCATCACTTTTACTCCAAGCATC
TCGAATTCCTGACAATGATAGCCTCGTAGTACTCTTGCACAGGTTAACTGTAATGGCTTCACAATTGA
AGATGAAGAACTTTCTCATTTGGGATCAGCGATATTTCTGATGTTGCATTGATGAATCATAGCTGTTGC
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AGGAGGTTTTTACCAGCTATATTGATCTCTGTACCCAACGGAAGATAGAAATGACCGGTTAAGAGATTC
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AGTTCGGAGGGCCAAGCACTATAATCCCTAGTGAGCTGCTGGAGATCTGCGAGCTCAGCCAGGAGAA
GATGAGCTCTGTGTTTGGAGACAGTAACGTGTACATGTTGCACATGATGTACCAGGCCATGGGTGTCTGC
TTGTACATGCAGGACTGGGAAGGAGCCCTGCAATATGGACAGAAAATCATTAGCCCTACAGTAAGCACT
ATCCTTTGTAAGTCCCTCAACGTGGCCTCCATGTGTTGAAGCTAGGGAGACTCTACATGGGCCTGGAACA
CAAAGCCGAGGGGAGAAAGCCCTGAAGAAGGCCATTGCAATCATGGAAGTAGCTCACGGCAAAGATCAT
CCATATATTCTGAGATCAAACAGGAAATTGAAAGCCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



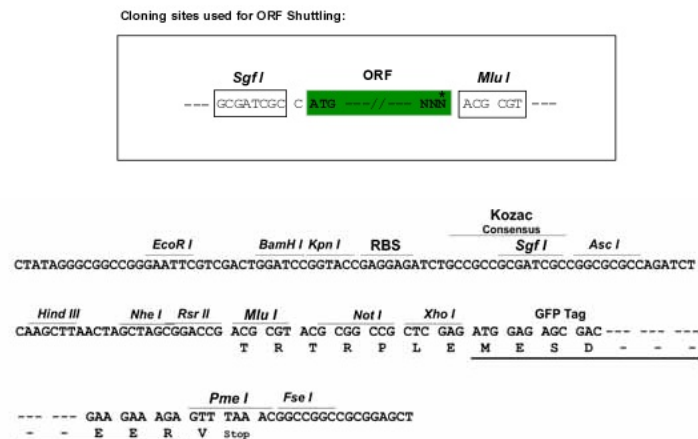
Protein Sequence: >RG214307 representing NM_020197
Red=Cloning site Green=Tags(s)

MRAEGLGGLERFCSPGKGRGLRALQPFQVGDLLFSCPAYAYVLTVNERGNHCEYCFTRKEGLSKCGRCKQ
AFYCNVECQKEDWPMHKLECSMVVFGENWNPSETVRLTARILAKQIHPERTPSEKLLAVKEFESHLDK
LDNEKKDLIQSDIAALHHFYSKHLEFPDNDLVVLFQVNCNGFTIEDEELSHLGSALFPDVALMNHSCC
PNVIVTYKGTAEVRAVQEIKPGEEVFTSYIDLITYPTEDRNDRLRDSYFFTCECQECTTKDKDKAKVEIR
KLSDDPKAEAIRDMVRYARNVIEEFRAKHYSKSPSELLEICELSQEKMSVFEDSNVYMLHMMYQAMGVC
LYMQDWEALQYGQKIIKPYSKHYPLYSNLVASMWLKLGRLYMGLEHKAAGEKALKKAIAIMEVAHGKDH
PYISEIKQEIESH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020197

ORF Size: 1299 bp

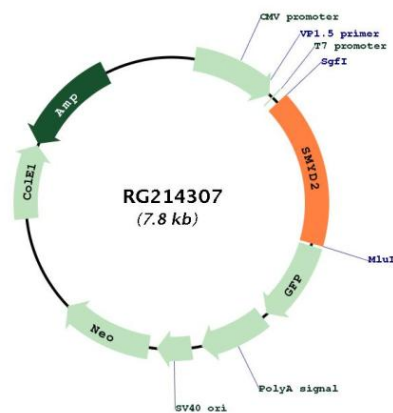
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_020197.1</u> , <u>NP_064582.1</u>
RefSeq Size:	1694 bp
RefSeq ORF:	1302 bp
Locus ID:	56950
UniProt ID:	<u>Q9NRG4</u>
Cytogenetics:	1q32.3
Domains:	SET, zf-MYND
Protein Families:	Druggable Genome
Gene Summary:	SET domain-containing proteins, such as SMYD2, catalyze lysine methylation (Brown et al., 2006 [PubMed 16805913]).[supplied by OMIM, Nov 2008]

Product images:



Circular map for RG214307