

Product datasheet for **MG219787**

Smox (NM_001177833) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smox (NM_001177833) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Smox
Synonyms:	B130066H01Rik; PAO; PAOh1; SMO
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG219787 representing NM_001177833
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCAAAGTTGTGAATCCAGTGGCGACAGTGGGATGACCTCTCAGTCGTGGCCTACGGAGAAGGGGAC
 AGCCTCGTGTGGTGGTATCGGTGCTGGCTTGGCTGGCCTGGCTGCAGCTAGAGCCCTTCTGGAGCAGGG
 CTTACCGGATGTCACTGTGCTTGAAGCTTCCAGCCACATTGGGGCCGTGTGCAGAGTGTGAGGCTTGA
 GACACCACCTTTGAGCTGGGAGCCACCTGGATCCATGGATCCCACGGGAATCCTATCTATCAACTAGCAG
 AAGCCAATGGCCTTTTGAAGAGACAACAGATGGGGAGCGCAGTGTGGCCGCATCAGCCTTTACTCAA
 GAATGGCGTGGCCTGCTACCTTACCAACCGTGGCTGCCGCATCCCCAAGGACGTGGTTGAGGAATTCAGC
 GATTTATACAACGAGGTCTATAACATGACCCAGGAGTTCTTCCGGCATGGTAAACCAGTCAATGCCGAGA
 GTCAGAACAGCGTCGGGGTGTCCACCCGGGAGAAGGTGCGGAATCGCATCAGGGATGACCCTGACGACAC
 AGAGGCCACCAAGCGCCTGAAGCTCGCCATGATCCAGCAGTACCTGAAGGTGGAGAGCTGTGAGAGCAGC
 TCCACAGCATAGATGAGGTGTCCCTGAGCGCCTTTGGAGAATGGACGGAGATCCCAGGCCCCATCACA
 TCATCCCCTCGGGCTTATGCGAGTTGTGGAGCTGCTGGCTGAGGGCATTCTCCACATGTCATCCAGTT
 GGGGAAGCCGGTCCGTTGCATCCACTGGGACCAGGCCTCGGCTCACCCCGGGGTCTGAGATCGAGCCC
 CGTGGTGAAGGTGATCACAATCACGACACTGGGAGGGTGGCCAGAGTGGAGAGAATCCGACGAGGGGA
 GGTGGGACGAGGATGAGCCGTGGCTGTAGTCGTGGAGTGCAGGATTGCGAGGTGATCCAGCGGACCA
 CGTGATTGTGACCGTTTCGCTGGCGTGTCAAGAGGCAGTACACCAGTTTCTTTAGGCCATGCCTGCC
 ACGGAGAAGGTGGCCGCCATCCACCGCTGGGCATTGGTACCAGTACCAAGATCTTCTTGAATTTGAGG
 AGCCCTTTTGGGCCCCGAGTGCAACAGCCTGCAGTTCTGTGGGAGGATGAGGCAGAGCTGTACCT
 CACCTACCCACCTGAGCTCTGGTACCGCAAGATCTGTGGCTTCGATGTCCTTTATCCGCCAGAGCGCTAT
 GGCCATGTGCTGAGTGGCTGGATCTGTGGGAGGAGGCTCTTGTGATGGAGAGGTGCGATGACGAGGCTG
 TAGCTGAGATCTGCACAGAGATGCTTCGACAGTTCACAGGGAACCCCAATATACCAAAACCTAGGCGAAT
 CCTGCGCTCAGCCTGGGGCAGCAACCCATACTCCGGGTTTCTATTCTACACAGAGTGGGCTCAAGT
 GGGGCGGATGTGGAGAAGCTAGCCAAGCCCTGCCCTACACAGAGAGCTCCAAGACAGCGCATAGAAGCT
 CCACAGAGCAGCAGCCTGGTACCTTTTACCATCCAAGTCCCAGAACAATCCCTGGACCCTAGTAGGGG
 CTCATAAAGCCCATGCAGGTGCTTTCTCCGGGAGGCCACACCCGCAAGTACTACTCCACCACCCAC
 GGTGCTCTGCTCTGGCCAGCGGAGGCCGCCGGCTCATCGAGATGTACCGAGACCTCTCCAGCAGG
 GGCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG219787 representing NM_001177833
 Red=Cloning site Green=Tags(s)

MQSCESSGDSADDPLSRGLRRRQPRVVVIGAGLAGLAAARALLEQGFDTVLEASSHIGGRVQSVRLG
 DTTFELGATWIHGSHGNPIYQLAEANGLLEETDGERVGRISLISKNGVACYLTNRGRIPKDVVEEFS
 DLYNEVYNMTQEFFRHGKPVNAESQNSVGVFTREKVRNRIRDDPDDTEATKRLKLAMIQQYLKVESCESS
 SHSIDEVSLSAFGEWTEIPGAHHIIPSGFMRVVELLAEGIPPHVIQLGKPVRCIHWDAQASAHPRGPEIEP
 RGEDHNDTGEQQSGENPQQGRWDEDEPWVVECEDCEVIPADHVIIVTVSLGVLKRQYTSFFRPCLP
 TEKVAAIHRLLGIGTTDKIFLEFEFPFWGPECNSLQFVWEDEAESCTLTYPPELWYRKICGFDVLYPPER
 GHVLSGWICGEEALVMERCDDAEVAEICTEMLRQFTGNPNIPKPRRILRSAGWSNPYFRGSYSYTVQVSS
 GADVEKLAKPLPYTESSKTAHRSSTEQQPGHLLPSKCPEQSLDPSRGSIKPMQVLFSGEATHRKYSTTH
 GALLSGQREARLIEMYRDLFQQGP

TRTRPLE – GFP Tag – V

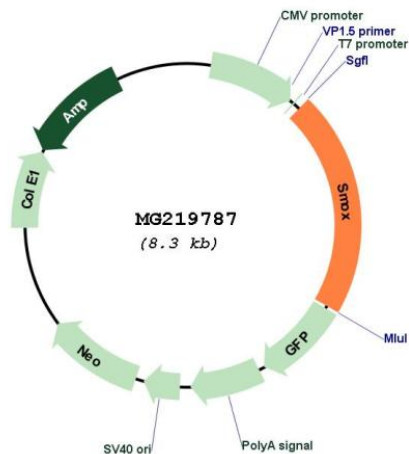
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001177833

ORF Size: 1755 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
Reconstitution Method:	<ol style="list-style-type: none">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:	<p>NM_001177833.1, NP_001171304.1</p>
RefSeq Size:	<p>2280 bp</p>
RefSeq ORF:	<p>1758 bp</p>
Locus ID:	<p>228608</p>
UniProt ID:	<p>Q99K82</p>
Cytogenetics:	<p>2 F1</p>
Gene Summary:	<p>Flavoenzyme which catalyzes the oxidation of spermine to spermidine. Can also use N(1)-acetylspermine and spermidine as substrates, with different affinity depending on the isoform (isozyme) and on the experimental conditions. Plays an important role in the regulation of polyamine intracellular concentration and has the potential to act as a determinant of cellular sensitivity to the antitumor polyamine analogs. May contribute to beta-alanine production via aldehyde dehydrogenase conversion of 3-amino-propanal. [UniProtKB/Swiss-Prot Function]</p>