

## Product datasheet for **MC212825**

### Smox (NM\_001177838) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Smox (NM_001177838) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Smox
Synonyms:	B130066H01Rik; PAO; PAOh1; SMO
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC212825 representing NM_001177838 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGCAAAGTTGTGAATCCAGTGGCGACAGTGCGGATGACCCTCTCAGTCGTGGCCTACGGAGAAGGGGAC  
AGCCTCGTGTGGTGGTGATCGGTGCTGGCTTGGCTGGCCTGGCTGCAGCTAGAGCCCTTCTGGAGCAGGG  
CTTCACGGATGCACTGTGCTTGAGGCTTCCAGCCACATTGGGGCCGTGTGCAGAGTGTGAGGCTTGA  
GACACCACCTTTGAGCTGGGAGCCACCTGGATCCATGGATCCACGGGAATCCTATCTCACTAGCAG  
AAGCCAATGGCCTTTTGAAGAGACAACAGATGGGGAGCGCAGTGTGGGCCGCATCAGCCTTTACTCAA  
GAATGGCGTGGCCTGCTACCTTACCAACCGTGGCTGCCGCATCCCAAGGACGTGGTTGAGGAATTCAGC  
GATTTATACAACGAGGTCTATAACATGACCCAGGAGTTCTTCCGGCATGGTAAACCAATGATGCGGAGA  
GTCAGAACAGCGTCGGGGTGTTACCCGGGAGAGGTGCGGAATCGCATCAGGGATGACCCTGACGACAC  
AGAGGCCACCAAGCGCCTGAAGCTCGCCATGATCCAGCAGTACCTGAAGCCCATGCAGGTGCTCTTCTCC  
GGGAGGCCACACACCGCAAGTACTACTCCACCACCCACGGTGTCTGCTCTCTGGCCAGCGCAGGCGCC  
CCCGGCTCATCGAGATGTACCGAGACCTTCCAGCAGGGGCC**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	SgfI-MluI
ACCN:	NM_001177838
Insert Size:	747 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u>NM_001177838.1, NP_001171309.1</u>
<b>RefSeq Size:</b>	1269 bp
<b>RefSeq ORF:</b>	747 bp
<b>Locus ID:</b>	228608
<b>UniProt ID:</b>	<u>Q99K82</u>
<b>Cytogenetics:</b>	2 F1
<b>Gene Summary:</b>	<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> <p>Transcript Variant: This variant (7) lacks three alternate exons but maintains the reading frame, compared to variant 1. The resulting protein (isoform g) is shorter when it is compared to isoform a. This transcript has also been called 'splice variant phi'.</p>