

Product datasheet for **MC217360**

Smox (NM_001177835) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smox (NM_001177835) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Smox
Synonyms:	B130066H01Rik; PAO; PAOh1; SMO
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC217360 representing NM_001177835
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCAAAGTTGTGAATCCAGTGGCGACAGTGGGATGACCTCTCAGTCGTGGCCTACGGAGAAGGGGAC
 AGCCTCGTGTGGTGGTATCGGTGCTGGCTTGGCTGGCCTGGCTGCAGCTAGAGCCCTTCTGGAGCAGGG
 CTTACCGGATGTCACTGTGCTTGAAGCTTCCAGCCACATTGGGGCCGTGTGCAGAGTGTGAGGCTTGA
 GACACCACCTTTGAGCTGGGAGCCACCTGGATCCATGGATCCCACGGGAATCCTATCTATCAACTAGCAG
 AAGCCAATGGCCTTTTGAAGAGACAACAGATGGGGAGCGCAGTGTGGGCCGCATCAGCCTTTACTCAA
 GAATGGCGTGGCCTGCTACCTTACCAACCGTGGCTGCCGCATCCCAAGGACGTGGTTGAGGAATTCAGC
 GATTTATACAACGAGGTCTATAACATGACCCAGGAGTTCTTCCGGCATGGTAAACCAGTCAATGCCGAGA
 GTCAGAACAGCGTCGGGGTGTCCACCCGGGAGAAGGTGCGGAATCGCATCAGGGATGACCCTGACGACAC
 AGAGGCCACCAAGCGCCTGAAGCTCGCCATGATCCAGCAGTACCTGAAGGTGGAGAGCTGTGAGAGCAGC
 TCCACAGCATAGATGAGGTGTCCCTGAGCGCCTTTGGAGAATGGACGGAGATCCAGGGCCCATCACA
 TCATCCCCTCGGGCTTCATGCGAGTTGTGGAGCTGCTGGCTGAGGGCATTCTCCACATGTCATCCAGTT
 GGGGAAGCCGGTCCGTTGCATCCACTGGGACCAGGCCTCGGCTCACCCCGGGGTCTGAGATCGAGCCC
 CGTGGTGAAGGTGATCACAATCACGACACTGGGAGGGTGGCCAGAGTGGAGAGAATCCGCAGCAGGGGA
 GGTGGGACGAGGATGAGCCGTGGCCTGTAGTCGTGGAGTGCAGGATTGCCAGGTGATCCAGCGGACCA
 CGTGATTGTGACCGTTTCGCTGGCGTGTCAAGAGGCAGTACACCAGTTTCTTTAGGCCATGCCTGCC
 ACGGAGAAGGTGGCCGCCATCCACCGCTGGGCATTGGTACCAGTACAAGATCTTCTTGAATTTGAGG
 AGCCCTTTTGGGCCCCGAGTGCAACAGCCTGCAGTTCGTGTGGGAGGATGAGGCAGAGAGCTGTACCT
 CACCTACCCACCTGAGCTCTGGTACCGCAAGATCTGTGGCTTCGATGTCCTTTATCCGCCAGAGCGCTAT
 GGCCATGTGCTGAGTGGCTGGATCTGTGGGAGGAGGCTCTTGTGATGGAGAGTGCAGTACGAGGCTG
 TAGCTGAGATCTGCACAGAGATGCTTCGACAGTTCACAGCCCATGCAGGTGCTCTTCTCCGGGGAGGCCA
 CACACCGCAAGTACTACTCCACCACCCAGGTGCTCTGCTCTCTGGCCAGCGGAGGCCGCCCGGCTCAT
 CGAGATGTACCGAGACCTTCCAGCAGGGGCCCTGAAAGGTGTCCTCACTGCCAAATGTGTTCT**TGA**

ACGGTACGGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001177835

Insert Size: 1539 bp

OTI Disclaimer: 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).

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_001177835.1](#), [NP_001171306.1](#)

RefSeq Size: 2029 bp

RefSeq ORF: 1539 bp

Locus ID: 228608

UniProt ID: [Q99K82](#)

Cytogenetics: 2 F1

Gene Summary: 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]

Transcript Variant: This variant (4) lacks two alternate exons which shifts the reading frame, compared to variant 1. The resulting protein (isoform d) is shorter and has a distinct C-terminus when it is compared to isoform a. This transcript has also been called 'splice variant gamma'.