

Product datasheet for MC212826

Smox (NM_001177839) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Smox (NM_001177839) 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

Fully Sequenced ORF: >MC212826 representing NM_001177839

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

GGGCTCAAGTGGGGCGGATGTGGAGAAGCTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001177839

Insert Size: 732 bp



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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: <u>NM 001177839.1, NP 001171310.1</u>

2 F1

 RefSeq Size:
 1430 bp

 RefSeq ORF:
 732 bp

 Locus ID:
 228608

 UniProt ID:
 Q99K82

Gene Summary:

Cytogenetics:

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 (8) lacks two alternate exons, which changes the reading frame and results in a premature stop codon, compared to variant 1. The resulting protein (isoform h) has a shorter and distinct C-terminus when it is compared to isoform a. This transcript has

also been called 'splice variant epsilon' and 'polyamine oxidase-s'.