

## Product datasheet for **RC218947L2V**

### SMOX (NM\_175839) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Lentiviral Particles   |
| Product Name:             | SMOX (NM_175839) Human Tagged ORF Clone Lentiviral Particle  |
| Symbol:                   | SMOX   |
| Synonyms:                 | C20orf16; PAO; PAO-1; PAO1; PAOH; PAOH1; SMO   |
| Mammalian Cell Selection: | None   |
| Vector:                   | pLenti-C-mGFP (PS100071)   |
| Tag:                      | mGFP   |
| ACCN:                     | NM_175839  |
| ORF Size:                 | 1665 bp  |
| ORF Nucleotide Sequence:  | The ORF insert of this clone is exactly the same as(RC218947).   |
| 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. <a href="#">More info</a> |
| OTI Annotation:           | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.   |
| RefSeq:                   | <a href="#">NM_175839.1</a>  |
| RefSeq Size:              | 2203 bp  |
| RefSeq ORF:               | 1668 bp  |
| Locus ID:                 | 54498  |
| UniProt ID:               | <a href="#">Q9NWM0</a>   |
| Cytogenetics:             | 20p13  |
| Protein Families:         | Druggable Genome   |
| MW:                       | 61.6 kDa   |



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**Gene Summary:**

Polyamines are ubiquitous polycationic alkylamines which include spermine, spermidine, putrescine, and agmatine. These molecules participate in a broad range of cellular functions which include cell cycle modulation, scavenging reactive oxygen species, and the control of gene expression. These molecules also play important roles in neurotransmission through their regulation of cell-surface receptor activity, involvement in intracellular signalling pathways, and their putative roles as neurotransmitters. This gene encodes an FAD-containing enzyme that catalyzes the oxidation of spermine to spermadine and secondarily produces hydrogen peroxide. Multiple transcript variants encoding different isoenzymes have been identified for this gene, some of which have failed to demonstrate significant oxidase activity on natural polyamine substrates. The characterized isoenzymes have distinctive biochemical characteristics and substrate specificities, suggesting the existence of additional levels of complexity in polyamine catabolism. [provided by RefSeq, Jul 2012]