

## Product datasheet for **RR211780L4V**

### Alox12b (NM\_001039377) Rat Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Alox12b (NM_001039377) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Alox12b
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001039377
ORF Size:	2103 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR211780).
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_001039377.1</a> , <a href="#">NP_001034466.1</a>
RefSeq Size:	2268 bp
RefSeq ORF:	2106 bp
Locus ID:	287425
UniProt ID:	<a href="#">Q2KMM4</a>
Cytogenetics:	10q24



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**Gene Summary:**

Non-heme iron-containing dioxygenase that catalyzes the stereo-specific peroxidation of free and esterified polyunsaturated fatty acids generating a spectrum of bioactive lipid mediators. Mainly converts arachidonic acid to (12R)-hydroperoxyeicosatetraenoic acid/(12R)-HPETE and minor stereoisomers. In the skin, acts upstream of ALOXE3 on the lineolate moiety of esterified omega-hydroxyacyl-sphingosine (EOS) ceramides to produce an epoxy-ketone derivative, a crucial step in the conjugation of omega-hydroxyceramide to membrane proteins. Therefore plays a crucial role in the synthesis of corneocytes lipid envelope and the establishment of the skin barrier to water loss. May also play a role in the regulation of the expression of airway mucins.[UniProtKB/Swiss-Prot Function]