

## Product datasheet for **MG223970**

### Alox12b (NM\_009659) Mouse Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                        |
| Product Name:             | Alox12b (NM_009659) Mouse Tagged ORF Clone |
| Tag:                      | TurboGFP                                   |
| Symbol:                   | Alox12b                                    |
| Synonyms:                 | 12R-; 12R-LOX; Alo; Aloxe2; e-LO; e-LOX2   |
| Mammalian Cell Selection: | Neomycin                                   |
| Vector:                   | pCMV6-AC-GFP (PS100010)                    |
| E. coli Selection:        | Ampicillin (100 ug/mL)                     |



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**ORF Nucleotide Sequence:**

>MG223970 representing NM\_009659  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCACCTATAAAGTCAAGGTGGCCACGGGCACTGACTTCTTTTCGGGACGCTGGATTCAATTTAC  
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 ACAGCGCAATAAGTGCCTCACCTCCCGTACTACTACCTGGACCCAGTGTGATTGAGAACAGTATTTCC  
 ATC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG223970 representing NM\_009659  
 Red=Cloning site Green=Tags(s)

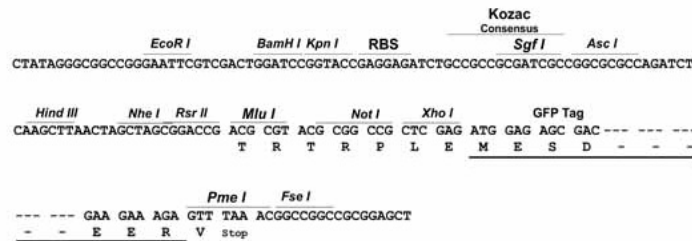
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 MMPIAIQLSQTPGDCPIFLPN DSEWDWLLAKTWVRYAEFYSHEAVAHLLESHLIGEAFC LALLRNLPMC  
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 QDLPGYYFRDDSLAVWYAMERYVTEIIT YYYPNDAAVEGDPELQCWVQEIFKECLL GRESSGFPTCLRTI  
 PELIEYVTMMYTC SARHA AVNSGQLEYTSWMPNFPSSMRNPPMQTKGLTTLQTYMDTLPDVKTT CIVLL  
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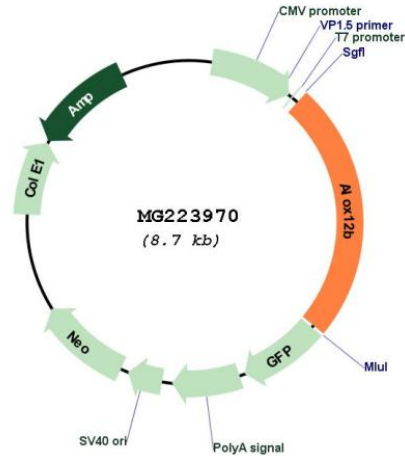
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_009659

**ORF Size:** 2103 bp

**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. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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\\_009659.2](#), [NP\\_033789.1](#)

**RefSeq Size:** 2347 bp

**RefSeq ORF:** 2106 bp

Locus ID: 11686

UniProt ID: [O70582](#)

Cytogenetics: 11 42.38 cM

**Gene Summary:** This gene encodes an enzyme involved in the conversion of arachidonic acid to 12R-hydroxyeicosatetraenoic acid. Mutations in this gene can prevent the formation of the epidermal permeability barrier and cause an ichthyosiform phenotype. [provided by RefSeq, Sep 2015]