

Product datasheet for RC217259L2

OriGene Technologies, Inc.

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5 Lipoxygenase (ALOX5) (NM_000698) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: 5 Lipoxygenase (ALOX5) (NM 000698) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: 5 Lipoxygenase

Synonyms: 5-LO; 5-LOX; 5LPG; LOG5

Mammalian Cell None

Selection:

Vector:pLenti-C-mGFP (PS100071)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC217259).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_000698

ORF Size: 2022 bp



5 Lipoxygenase (ALOX5) (NM_000698) Human Tagged Lenti ORF Clone - RC217259L2

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: <u>NM 000698.2</u>

RefSeq Size: 2568 bp
RefSeq ORF: 2025 bp
Locus ID: 240

 UniProt ID:
 P09917

 Cytogenetics:
 10q11.21

Domains: lipoxygenase, PLAT

Protein Families: Druggable Genome

Protein Pathways: Arachidonic acid metabolism, Metabolic pathways

MW: 77.8 kDa

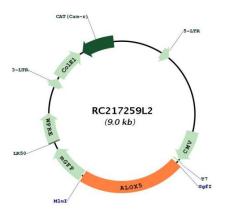
Gene Summary: This gene encodes a member of the lipoxygenase gene family and plays a dual role in the

synthesis of leukotrienes from arachidonic acid. The encoded protein, which is expressed specifically in bone marrow-derived cells, catalyzes the conversion of arachidonic acid to 5(S)-hydroperoxy-6-trans-8,11,14-cis-eicosatetraenoic acid, and further to the allylic epoxide 5(S)-trans-7,9-trans-11,14-cis-eicosatetrenoic acid (leukotriene A4). Leukotrienes are important mediators of a number of inflammatory and allergic conditions. Mutations in the promoter region of this gene lead to a diminished response to antileukotriene drugs used in the treatment of asthma and may also be associated with atherosclerosis and several cancers. Alternatively spliced transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, Jan 2012]



Product images:



Circular map for RC217259L2