

Product datasheet for **RC217259L3V**

5 Lipoxygenase (ALOX5) (NM_000698) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	5 Lipoxygenase (ALOX5) (NM_000698) Human Tagged ORF Clone Lentiviral Particle
Symbol:	5 Lipoxygenase
Synonyms:	5-LO; 5-LOX; 5LPG; LOG5
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_000698
ORF Size:	2022 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC217259).
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.
RefSeq:	NM_000698.2
RefSeq Size:	2568 bp
RefSeq ORF:	2025 bp
Locus ID:	240
UniProt ID:	P09917
Cytogenetics:	10q11.21
Domains:	lipoxygenase, PLAT
Protein Families:	Druggable Genome



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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-eicosatetraenoic 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]