

Product datasheet for MR208569L4

Aldh6a1 (NM_134042) Mouse Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aldh6a1 (NM_134042) Mouse Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Aldh6a1
Synonyms:	1110038I05Rik; Mmsd; Mmsdh
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR208569).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

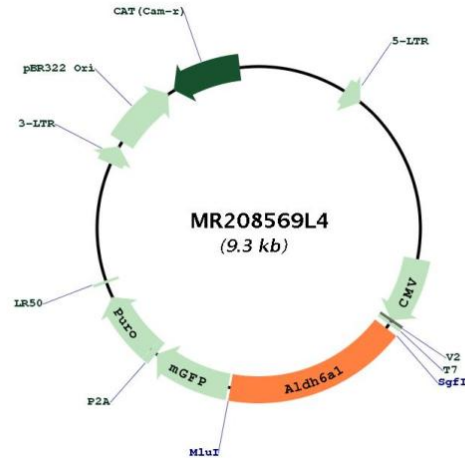
Cloning sites used for ORF Shuttling:



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



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Plasmid Map:


ACCN: NM_134042

ORF Size: 1608 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_134042.2](#), [NP_598803.1](#)

RefSeq Size: 3346 bp

RefSeq ORF: 1608 bp

Locus ID: 104776

UniProt ID: [Q9EQ20](#)

Cytogenetics: 12 39.21 cM

Gene Summary: This gene encodes a member of the aldehyde dehydrogenase protein family. The encoded enzyme is a mitochondrial methylmalonate semialdehyde dehydrogenase that plays a role in the valine and pyrimidine catabolic pathways. This enzyme catalyzes the irreversible oxidative decarboxylation of malonate and methylmalonate semialdehydes to acetyl- and propionyl-CoA. Mutations in the human gene result in Methylmalonate Semialdehyde Dehydrogenase Deficiency, characterized by elevated beta-alanine, 3-hydroxypropionic acid, and both isomers of 3-amino and 3-hydroxyisobutyric acids in urine organic acids. Alternate splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 2015]