

## Product datasheet for RR205471L4

### Adh7 (NM\_134329) Rat Tagged Lenti ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Adh7 (NM_134329) Rat Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Adh7
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(RR205471).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:

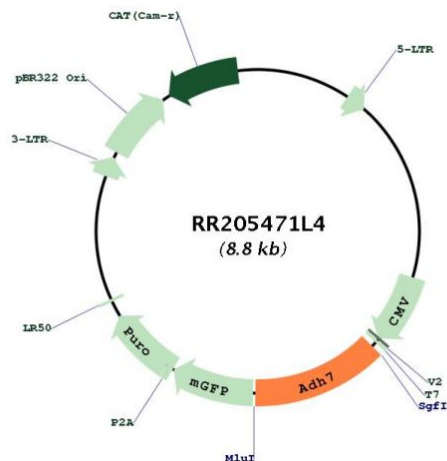


\* The last codon before the Stop codon of the ORF.



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## Plasmid Map:



ACCN: NM\_134329

ORF Size: 1122 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\\_134329.1](#), [NP\\_599156.1](#)

RefSeq Size: 2048 bp

RefSeq ORF: 1125 bp

Locus ID: 171178

UniProt ID: [P41682](#)

Cytogenetics: 2q44

**Gene Summary:** Catalyzes the NAD-dependent oxidation of all-trans-retinol, alcohol, aldehyde and omega-hydroxy fatty acids and their derivatives. Oxidizes preferentially all trans-retinol, all-trans-4-hydroxyretinol, 9-cis-retinol, 2-hexenol, and long chain omega-hydroxy fatty acids such as juniperic acid. In vitro can also catalyzes the NADH-dependent reduction of all-trans-retinal and aldehydes and their derivatives. Reduces preferentially all trans-retinal, all-trans-4-oxoretinal and hexanal. Catalyzes in the oxidative direction with higher efficiency. Therefore may participate in retinoid metabolism, fatty acid omega-oxidation, and elimination of cytotoxic aldehydes produced by lipid peroxidation.[UniProtKB/Swiss-Prot Function]