

# Product datasheet for RC201561L4

# GALE (NM\_000403) Human Tagged Lenti ORF Clone

### **Product data:**

#### OriGene Technologies, Inc.

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Expression Plasmids
GALE (NM_000403) Human Tagged Lenti ORF Clone
mGFP
GALE
SDR1E1
Puromycin
pLenti-C-mGFP-P2A-Puro (PS100093)
Chloramphenicol (34 ug/mL)
The ORF insert of this clone is exactly the same as(RC201561).
Sgfl-Mlul
Cloning sites used for ORF Shuttling:
Sgf I         ORF         Mlu I           GCG ATC GCC         ATG // NNÑ         ACG CGT



ACCN: ORF Size: NM\_000403 1044 bp

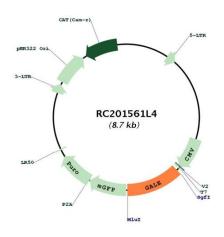


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<b>GALE</b>	(NM_000403) Human Tagged Lenti ORF Clone – RC201561L4
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can 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. <u>More info</u>
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:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
RefSeq:	<u>NM 000403.3</u>
RefSeq Size:	1647 bp
RefSeq ORF:	1047 bp
Locus ID:	2582
UniProt ID:	<u>Q14376</u>
Cytogenetics:	1p36.11
Protein Families:	Druggable Genome
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Galactose metabolism, Metabolic pathways
MW:	38.3 kDa
Gene Summary:	This gene encodes UDP-galactose-4-epimerase which catalyzes two distinct but analogous reactions: the epimerization of UDP-glucose to UDP-galactose, and the epimerization of UDP-N-acetylglucosamine to UDP-N-acetylgalactosamine. The bifunctional nature of the enzyme has the important metabolic consequence that mutant cells (or individuals) are dependent not only on exogenous galactose, but also on exogenous N-acetylgalactosamine as a necessary precursor for the synthesis of glycoproteins and glycolipids. Mutations in this gene result in epimerase-deficiency galactosemia, also referred to as galactosemia type 3, a disease characterized by liver damage, early-onset cataracts, deafness and cognitive disability, with symptoms ranging from mild ('peripheral' form) to severe ('generalized' form). Multiple alternatively spliced transcripts encoding the same protein have been identified. [provided by RefSeq, Jul 2008]

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# **Product images:**



Circular map for RC201561L4

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