

Product datasheet for RC221214L1

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

alpha Lactalbumin (LALBA) (NM_002289) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: alpha Lactalbumin (LALBA) (NM_002289) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: alpha Lactalbumin

Synonyms: LYZG
Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

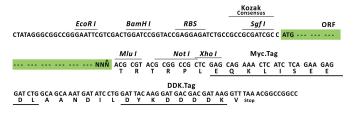
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC221214).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_002289

ORF Size: 426 bp





alpha Lactalbumin (LALBA) (NM_002289) Human Tagged Lenti ORF Clone - RC221214L1

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 002289.2</u>

 RefSeq Size:
 742 bp

 RefSeq ORF:
 429 bp

 Locus ID:
 3906

 UniProt ID:
 P00709

Cytogenetics:

Protein Families: Secreted Protein

Protein Pathways: Galactose metabolism

12q13.11

MW: 16.22 kDa

Gene Summary: This gene encodes alpha-lactalbumin, a principal protein of milk. Alpha-lactalbumin forms the

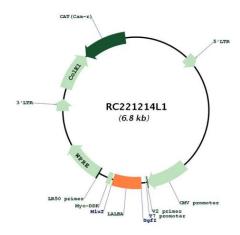
regulatory subunit of the lactose synthase (LS) heterodimer and beta 1,4-

galactosyltransferase (beta4Gal-T1) forms the catalytic component. Together, these proteins enable LS to produce lactose by transfering galactose moieties to glucose. As a monomer, alpha-lactalbumin strongly binds calcium and zinc ions and may possess bactericidal or antitumor activity. A folding variant of alpha-lactalbumin, called HAMLET, likely induces

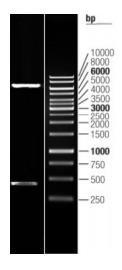
apoptosis in tumor and immature cells. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC221214L1



Double digestion of RC221214L1 using Sgfl and Mlul