

## **Product datasheet for TL311807**

## OriGene Technologies, Inc.

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## alpha Lactalbumin (LALBA) Human shRNA Plasmid Kit (Locus ID 3906)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** alpha Lactalbumin (LALBA) Human shRNA Plasmid Kit (Locus ID 3906)

Locus ID: 3906 Synonyms: LYZG

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** LALBA - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 3906).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 002289, NM 002289.1, NM 002289.2, BC069103, BC112316, BC112318, NM 002289.3

UniProt ID: P00709

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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).