

## **Product datasheet for MR222979L4**

### Lag3 (NM\_008479) Mouse Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Lag3 (NM\_008479) Mouse Tagged Lenti ORF Clone

Tag: mGFP Symbol: Lag3

Synonyms: CD223; LAG-3; Ly66

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(MR222979).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_008479

ORF Size: 1563 bp



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#### Lag3 (NM\_008479) Mouse Tagged Lenti ORF Clone - MR222979L4

**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 008479.2</u>, <u>NP 032505.1</u>

 RefSeq Size:
 2020 bp

 RefSeq ORF:
 1566 bp

 Locus ID:
 16768

 UniProt ID:
 061790

**Cytogenetics:** 6 F2

**Gene Summary:** Lymphocyte activation gene 3 protein: Inhibitory receptor on antigen activated T-cells

(PubMed:12209638, PubMed:12421911, PubMed:12672063, PubMed:15100286,

PubMed:15634887, PubMed:30580966). Delivers inhibitory signals upon binding to ligands, such as FGL1 (PubMed:30580966). FGL1 constitutes a major ligand of LAG3 and is responsible for LAG3 T-cell inhibitory function (PubMed:30580966). Following TCR engagement, LAG3 associates with CD3-TCR in the immunological synapse and directly inhibits T-cell activation

(PubMed:12209638, PubMed:12421911, PubMed:12672063, PubMed:15100286,

PubMed:15634887). May inhibit antigen-specific T-cell activation in synergy with PDCD1/PD-1, possibly by acting as a coreceptor for PDCD1/PD-1 (PubMed:21300912). Negatively regulates the proliferation, activation, effector function and homeostasis of both CD8(+) and CD4(+) T-cells (PubMed:12209638, PubMed:12421911, PubMed:12672063, PubMed:15100286,

PubMed:15634887). Also mediates immune tolerance: constitutively expressed on a subset of regulatory T-cells (Tregs) and contributes to their suppressive function (PubMed:15485628).

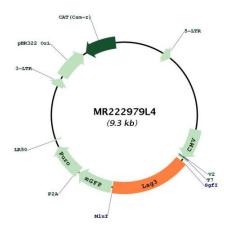
Also acts as a negative regulator of plasmacytoid dendritic cell (pDCs) activation (PubMed:19201841). Binds MHC class II (MHC-II); the precise role of MHC-II-binding is

however unclear (PubMed:12209638, PubMed:12421911, PubMed:15634887).

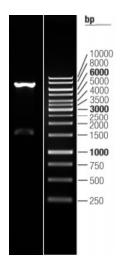
[UniProtKB/Swiss-Prot Function]



# **Product images:**



Circular map for MR222979L4



Double digestion of MR222979L4 using Sgfl and Mlul  $\,$