

Product datasheet for TL511709

Lag3 Mouse shRNA Plasmid (Locus ID 16768)

Product data:

Product Type: shRNA Plasmids

Product Name: Lag3 Mouse shRNA Plasmid (Locus ID 16768)

Locus ID: 16768

Synonyms: CD223; LAG-3; Ly66

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Lag3 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 16768).

5µg purified plasmid DNA per construct

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

RefSeq: <u>BC120591</u>, <u>NM 008479</u>, <u>NM 008479.1</u>, <u>NM 008479.2</u>

UniProt ID: Q61790

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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(+) Tcells (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]

shRNA Design:

Performance Guaranteed: 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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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).