

Product datasheet for TL515515V

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

Lgals9 Mouse shRNA Lentiviral Particle (Locus ID 16859)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Lgals9 Mouse shRNA Lentiviral Particle (Locus ID 16859)

Locus ID: 16859

Synonyms: AA407335; Al194909; Al265545; gal-9; galectin-9; Lgals5; LGALS35

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Lgals9 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: BC003754, NM 001159301, NM 010708, NM 001159301.1, NM 010708.1, NM 010708.2

UniProt ID: <u>008573</u>



Summary:

Binds galactosides (By similarity). Has high affinity for the Forssman pentasaccharide (By similarity). Ligand for HAVCR2/TIM3 (By similarity). Binding to HAVCR2 induces T-helper type 1 lymphocyte (Th1) death (By similarity). Also stimulates bactericidal activity in infected macrophages by causing macrophage activation and IL1B secretion which restricts intracellular bacterial growth (PubMed:20937702). Ligand for P4HB; the interaction retains P4HB at the cell surface of Th2 T-helper cells, increasing disulfide reductase activity at the plasma membrane, altering the plasma membrane redox state and enhancing cell migration (PubMed:21670307). Ligand for CD44; the interaction enhances binding of SMAD3 to the FOXP3 promoter, leading to up-regulation of FOXP3 expression and increased induced regulatory T (iTreg) cell stability and suppressive function (PubMed:25065622). Promotes ability of mesenchymal stromal cells to suppress T-cell proliferation (By similarity). Expands regulatory T-cells and induces cytotoxic T-cell apoptosis following virus infection (By similarity). Activates ERK1/2 phosphorylation inducing cytokine (IL-6, IL-8, IL-12) and chemokine (CCL2) production in mast and dendritic cells (By similarity). Inhibits degranulation and induces apoptosis of mast cells (By similarity). Induces maturation and migration of dendritic cells (By similarity). Inhibits natural killer (NK) cell function (PubMed:23408620). Can transform NK cell phenotype from peripheral to decidual during pregnancy (By similarity). Astrocyte derived galectin-9 enhances microglial TNF production (PubMed:25158758). May play a role in thymocyte-epithelial interactions relevant to the biology of the thymus. May provide the molecular basis for urate flux across cell membranes, allowing urate that is formed during purine metabolism to efflux from cells and serving as an electrogenic transporter that plays an important role in renal and gastrointestinal urate excretion (By similarity). Highly selective to the anion urate (By similarity). [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).