Product datasheet for TL515032

Tnfrsf14 Mouse shRNA Plasmid (Locus ID 230979)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Tnfrsf14 Mouse shRNA Plasmid (Locus ID 230979)
Locus ID:	230979
Synonyms:	Atar; HveA; Hvem; Tnfrs14
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	Tnfrsf14 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 230979). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	BC104054, BC104055, NM_178931, NM_178931.1, NM_178931.2, BC022125
UniProt ID:	Q80WM9

View online »

Summary: Receptor for four distinct ligands: The TNF superfamily members TNFSF14/LIGHT and homotrimeric LTA/lymphotoxin-alpha and the immunoglobulin superfamily members BTLA and CD160, altogether defining a complex stimulatory and inhibitory signaling network (By similarity). Signals via the TRAF2-TRAF3 E3 ligase pathway to promote immune cell survival and differentiation (PubMed:19915044). Participates in bidirectional cell-cell contact signaling between antigen presenting cells and lymphocytes. In response to ligation of TNFSF14/LIGHT, delivers costimulatory signals to T cells, promoting cell proliferation and effector functions (By similarity). Interacts with CD160 on NK cells, enhancing IFNG production and anti-tumor immune response (PubMed:25711213). In the context of bacterial infection, acts as a signaling receptor on epithelial cells for CD160 from intraepithelial lymphocytes, triggering the production of antimicrobial proteins and proinflammatory cytokines (PubMed:22801499). Upon binding to CD160 on activated CD4+ T cells, downregulates CD28 costimulatory signaling, restricting memory and alloantigen-specific immune response (By similarity). May interact in cis (on the same cell) or in trans (on other cells) with BTLA (PubMed:19915044, PubMed:15568026). In cis interactions, appears to play an immune regulatory role inhibiting in trans interactions in naive T cells to maintain a resting state. In trans interactions, can predominate during adaptive immune response to provide survival signals to effector T cells (PubMed:19915044, PubMed:15568026).[UniProtKB/Swiss-Prot Function]

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

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).