

# **Product datasheet for TL519199V**

### OriGene Technologies, Inc.

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## **Cxcl10 Mouse shRNA Lentiviral Particle (Locus ID 15945)**

#### **Product data:**

**Product Type:** shRNA Lentiviral Particles

**Product Name:** Cxcl10 Mouse shRNA Lentiviral Particle (Locus ID 15945)

**Locus ID:** 15945

**Synonyms:** C7; CRG-2; gIP-10; Ifi10; INP10; IP-10; IP10; mob-1; Scyb10

**Vector:** pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Cxcl10 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

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

RefSeq: <u>BC030067, NM 021274, NM 021274.1, NM 021274.2, BC057150</u>

UniProt ID: P17515

**Summary:** Pro-inflammatory cytokine that is involved in a wide variety of processes such as chemotaxis,

differentiation, and activation of peripheral immune cells, regulation of cell growth, apoptosis and modulation of angiostatic effects (By similarity) (PubMed:28623423). Plays thereby an important role during viral infections by stimulating the activation and migration of immune cells to the infected sites (PubMed:18624292, PubMed:19017990, PubMed:28468883). Mechanistically, binding of CXCL10 to the CXCR3 receptor activates G protein-mediated signaling and results in downstream activation of phospholipase C-dependent pathway, an increase in intracellular calcium production and actin reorganization. In turn, recruitment of activated Th1 lymphocytes occurs at sites of inflammation (By similarity). Activation of the CXCL10/CXCR3 axis plays also an important role in neurons in response to brain injury for activating microglia, the resident macrophage population of the central nervous system, and directing them to the lesion site. This recruitment is an essential element for neuronal

reorganization (PubMed:15456824).[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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



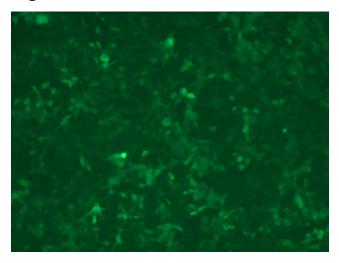


### Performance Guaranteed:

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.

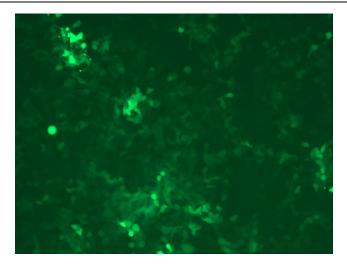
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

# **Product images:**

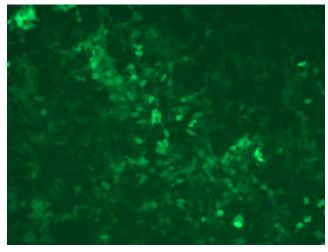


GFP signal was observed under microscope at 48 hours after transduction of TL519199A virus into HEK293 cells. TL519199A virus was prepared using lenti-shRNA TL519199A and [TR30037] packaging kit.

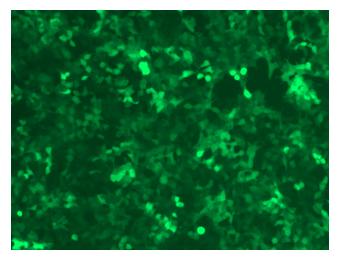




GFP signal was observed under microscope at 48 hours after transduction of TL519199B virus into HEK293 cells. TL519199B virus was prepared using lenti-shRNA TL519199B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL519199C] virus into HEK293 cells. [TL519199C] virus was prepared using lenti-shRNA [TL519199C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL519199D] virus into HEK293 cells. [TL519199D] virus was prepared using lenti-shRNA [TL519199D] and [TR30037] packaging kit.