

## **Product datasheet for TL501066**

## OriGene Technologies, Inc.

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## Il10ra Mouse shRNA Plasmid (Locus ID 16154)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Il10ra Mouse shRNA Plasmid (Locus ID 16154)

**Locus ID:** 16154

Synonyms: AW553859; CDw210; CDw210a; IL-10R1; IL-10RA; Il10r; mIL-10R

Vector: pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Puromycin

Selection:

Format: Lentiviral plasmids

**Components:** Il10ra - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 16154).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001324486, NM 008348, NR 136903, NM 008348.1, NM 008348.2, NM 008348.3,

BC140355, BC146496

UniProt ID: 061727

Summary: Cell surface receptor for the cytokine IL10 that participates in IL10-mediated anti-

inflammatory functions, limiting excessive tissue disruption caused by inflammation. Upon binding to IL10, induces a conformational change in IL10RB, allowing IL10RB to bind IL10 as well. In turn, the heterotetrameric assembly complex, composed of two subunits of IL10RA and IL10RB, activates the kinases JAK1 and TYK2 that are constitutively associated with IL10RA and IL10RB respectively. These kinases then phosphorylate specific tyrosine residues in the intracellular domain in IL10RA leading to the recruitment and subsequent phosphorylation of STAT3 (PubMed:8910398). Once phosphorylated, STAT3 homodimerizes, translocates to the nucleus and activates the expression of anti-inflammatory genes. In addition, IL10RA-mediated activation of STAT3 inhibits starvation-induced autophagy (By similarity).

[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).