

Product datasheet for **TR501089**

Il6st Mouse shRNA Plasmid (Locus ID 16195)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Il6st Mouse shRNA Plasmid (Locus ID 16195)
Locus ID:	16195
Synonyms:	5133400A03Rik; AA389424; BB405851; CD130; D13Ertd699e; gp130
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Il6st - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 16195). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC058679 , NM_010560 , NM_010560.1 , NM_010560.2 , NM_010560.3 , BC009665 , BC020454 , BC049887 , BC058551
UniProt ID:	Q00560
Summary:	Signal-transducing molecule. The receptor systems for IL6, LIF, OSM, CNTF, IL11, CTF1 and BSF3 can utilize IL6ST for initiating signal transmission. Binding of IL6 to IL6R induces IL6ST homodimerization and formation of a high-affinity receptor complex, which activates Janus kinases (PubMed:1602143). That causes phosphorylation of IL6ST tyrosine residues which in turn activates STAT3 (PubMed:10661409). Mediates signals which regulate immune response, hematopoiesis, pain control and bone metabolism (PubMed:10661409, PubMed:26255596, PubMed:25057188, PubMed:8552649). Has a role in embryonic development (PubMed:10661409). Does not bind IL6 (By similarity). Essential for survival of motor and sensory neurons and for differentiation of astrocytes (PubMed:10377352). Required for expression of TRPA1 in nociceptive neurons (PubMed:25057188). Required for the maintenance of PTH1R expression in the osteoblast lineage and for the stimulation of PTH-induced osteoblast differentiation (PubMed:25228504). Required for normal trabecular bone mass and cortical bone composition (PubMed:24339143, PubMed:9348227, PubMed:26255596).[UniProtKB/Swiss-Prot Function]



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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).