

Product datasheet for TR511785

Kitl Mouse shRNA Plasmid (Locus ID 17311)

Product data:

Product Type: shRNA Plasmids

Product Name: Kitl Mouse shRNA Plasmid (Locus ID 17311)

Locus ID: 17311

Synonyms: blz; Clo; Con; contrasted; Gb; Kitlg; Mgf; SCF; SF; SI; SLF

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Kitl - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

17311). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>BC011322</u>, <u>NM 001347156</u>, <u>NM 013598</u>, <u>NM 013598.1</u>, <u>NM 013598.2</u>

UniProt ID: P20826

Summary: Ligand for the receptor-type protein-tyrosine kinase KIT. Plays an essential role in the

regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. KITLG/SCF binding can activate several signaling pathways. Promotes phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, and subsequent activation of the kinase AKT1. KITLG/SCF and KIT also transmit signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. KITLG/SCF and KIT promote activation of STAT family members STAT1, STAT3 and STAT5. KITLG/SCF and KIT promote

activation of PLCG1, leading to the production of the cellular signaling molecules

diacylglycerol and inositol 1,4,5-trisphosphate. KITLG/SCF acts synergistically with other

cytokines, probably interleukins.[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>.



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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).