

Product datasheet for **TR500933**

Hbb-b1 Mouse shRNA Plasmid (Locus ID 15129)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Hbb-b1 Mouse shRNA Plasmid (Locus ID 15129)
Locus ID:	15129
Synonyms:	AA409645; beta1; Hbb1; Hbbt1; Hbbt2; Mommed7
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Hbb-b1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID = 15129). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001278161 , NM_008220.1 , NM_008220.2 , NM_008220.3 , NM_008220.4 , NM_001278161.1 , BC152793 , BC156762
UniProt ID:	P02088
Summary:	This gene encodes a beta polypeptide chain found in adult hemoglobin, which consists of a tetramer of two alpha chains and two beta chains, and which functions in the transport of oxygen to various peripheral tissues. This gene is one of a cluster of beta-hemoglobin genes that are distally regulated by a locus control region, and which are organized along the chromosome in the order of their developmental expression. In mouse, two major strain-specific haplotypes of the beta-globin gene cluster are found - a "single" haplotype found in C57BL/-type strains, which includes two highly similar adult beta-globin genes, beta s and beta t, and a "diffuse" haplotype found in strains such as BALB/c and 129Sv, which includes two somewhat diverse adult beta-globin genes, beta-major and beta-minor. This gene represents the beta-major adult gene found in the "diffuse" haplotype. Primary chromosome 7 of the mouse reference genome assembly, which is derived from C57BL/6 strain mice, represents the "single" haplotype, while the "diffuse" haplotype is represented in the reference genome collection by the BALB/c strain alternate contig, NT_095534.1. [provided by RefSeq, May 2013]



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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).