

Product datasheet for **TR313187**

EPO Human shRNA Plasmid Kit (Locus ID 2056)

Product data:

Product Type:	shRNA Plasmids
Product Name:	EPO Human shRNA Plasmid Kit (Locus ID 2056)
Locus ID:	2056
Synonyms:	DBAL; EYTS5; EP; MVCD2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	EPO - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 2056). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_000799 , NM_000799.1 , NM_000799.2 , BC093628 , BC093628.1 , BC111937 , BC143225 , NM_000799.4
UniProt ID:	P01588
Summary:	This gene encodes a secreted, glycosylated cytokine composed of four alpha helical bundles. The encoded protein is mainly synthesized in the kidney, secreted into the blood plasma, and binds to the erythropoietin receptor to promote red blood cell production, or erythropoiesis, in the bone marrow. Expression of this gene is upregulated under hypoxic conditions, in turn leading to increased erythropoiesis and enhanced oxygen-carrying capacity of the blood. Expression of this gene has also been observed in brain and in the eye, and elevated expression levels have been observed in diabetic retinopathy and ocular hypertension. Recombinant forms of the encoded protein exhibit neuroprotective activity against a variety of potential brain injuries, as well as antiapoptotic functions in several tissue types, and have been used in the treatment of anemia and to enhance the efficacy of cancer therapies. [provided by RefSeq, Aug 2017]
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 .



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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).