

## **Product datasheet for TL310592**

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## **PBX1 Human shRNA Plasmid Kit (Locus ID 5087)**

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: PBX1 Human shRNA Plasmid Kit (Locus ID 5087)

**Locus ID:** 5087

Synonyms: CAKUHED

**Vector:** pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** PBX1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 5087).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001204961, NM 001204963, NM 002585, NM 001353130, NM 001353131, NM 002585.2,

NM 002585.3, NM 001204961.1, NM 001204963.1, BC101578, BC101578.1, BC044624,

BC143435, BC143451, NM 002585.4, NM 001204961.2

UniProt ID: P40424

**Summary:** This gene encodes a nuclear protein that belongs to the PBX homeobox family of

transcriptional factors. Studies in mice suggest that this gene may be involved in the regulation of osteogenesis and required for skeletal patterning and programming. A

chromosomal translocation, t(1;19) involving this gene and TCF3/E2A gene, is associated with pre-B-cell acute lymphoblastic leukemia. The resulting fusion protein, in which the DNA binding domain of E2A is replaced by the DNA binding domain of this protein, transforms cells by constitutively activating transcription of genes regulated by the PBX protein family. Alternatively spliced transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, Jun 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 <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).