

Product datasheet for TR500284

OriGene Technologies, Inc.

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Cbfa2t3 Mouse shRNA Plasmid (Locus ID 12398)

Product data:

Product Type: shRNA Plasmids

Product Name: Cbfa2t3 Mouse shRNA Plasmid (Locus ID 12398)

Locus ID: 12398

Synonyms: A630044F12Rik; Al465270; AW229127; Cbfa2t3h; ETO-2; Eto2; MTGR2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Cbfa2t3 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

12398). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001109873, NM 009824, NM 177289, NM 009824.1, NM 009824.2, NM 177289.1,

NM 001109873.1, BC141396, BC055951, BC151156

UniProt ID: <u>054972</u>

Summary: Transcriptional corepressor which facilitates transcriptional repression via its association with

DNA-binding transcription factors and recruitment of other corepressors and histone-modifying enzymes. Can repress the expression of MMP7 in a ZBTB33-dependent manner. Reduces the protein levels and stability of the transcriptinal regulator HIF1A; interacts with

EGLN1 and promotes the HIF1A prolyl hydroxylation-dependent ubiquitination and

proteasomal degradation pathway. Contributes to inhibition of glycolysis and stimulation of mitochondrial respiration by down-regulating the expression of glycolytic genes including PFKFB3, PFKFB4, PDK1, PFKP, LDHA and HK1 which are direct targets of HIF1A (By similarity). Regulates the proliferation and the differentiation of erythroid progenitors by repressing the

expression of TAL1 target genes (PubMed:16407974). Plays a role in granulocyte

differentiation (PubMed:15231665).[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>.





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).