

Product datasheet for **TR515616**

Cbx7 Mouse shRNA Plasmid (Locus ID 52609)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Cbx7 Mouse shRNA Plasmid (Locus ID 52609)
Locus ID:	52609
Synonyms:	1600014J01Rik; AI851678; D15Ertd417e
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Cbx7 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 52609). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC021398 , NM_144811 , NM_144811.1 , NM_144811.2 , NM_144811.3 , BC030919 , BC042657
UniProt ID:	Q8VDS3
Summary:	Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development (PubMed:16537902, PubMed:22226355). PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility. Promotes histone H3 trimethylation at 'Lys-9' (H3K9me3) (By similarity). Binds to histone H3 trimethylated at 'Lys-9' (H3K9me3) or at 'Lys-27' (H3K27me3) (PubMed:16537902, PubMed:22226355). Trimethylation at 'Lys-27' (H3K27me3) is important for chromatin recruitment (PubMed:22226355, PubMed:16537902). May possibly also bind trimethylated lysine residues in other proteins (in vitro) (PubMed:16537902). Binds non-coding, single-stranded RNA and double-stranded RNA (PubMed:20541999, PubMed:16537902). Plays a role in the timely repression of differentiation-specific genes in pluripotent embryonic stem cells to maintain the undifferentiated state (PubMed:22226355). Regulator of cellular lifespan by maintaining the repression of CDKN2A, but not by inducing telomerase activity (PubMed:14647293).[UniProtKB/Swiss-Prot Function]



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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).