

Product datasheet for TL304081

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

HMBOX1 Human shRNA Plasmid Kit (Locus ID 79618)

Product data:

Product Type: shRNA Plasmids

Product Name: HMBOX1 Human shRNA Plasmid Kit (Locus ID 79618)

Locus ID: 79618

Synonyms: HNF1LA; HOT1; PBHNF; TAH1

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: HMBOX1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

79618). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001135726, NM 024567, NM 001324382, NM 001324383, NM 001324384,

NM 001324385, NM 001324386, NM 001324387, NM 001324388, NM 001324389, NM 001324390, NM 001324391, NM 001324392, NM 001324393, NM 001324394, NM 001324395, NM 001330498, NR 136757, NR 136758, NM 024567.1, NM 024567.2, NM 024567.3, NM 024567.4, NM 001135726.1, NM 001135726.2, BC069242, BC069242.1,

BC009259, NM 001135726.3

UniProt ID: Q6NT76

Summary: Binds directly to 5'-TTAGGG-3' repeats in telomeric DNA (PubMed:23813958,

PubMed:23685356). Associates with the telomerase complex at sites of active telomere processing and positively regulates telomere elongation (PubMed:23685356). Important for TERT binding to chromatin, indicating a role in recruitment of the telomerase complex to telomeres (By similarity). Also plays a role in the alternative lengthening of telomeres (ALT) pathway in telomerase-negative cells where it promotes formation and/or maintenance of ALT-associated promyelocytic leukemia bodies (APBs) (PubMed:23813958). Enhances formation of telomere C-circles in ALT cells, suggesting a possible role in telomere

recombination (PubMed:23813958). Might also be involved in the DNA damage response at

telomeres (PubMed:23813958).[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 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).