

# **Product datasheet for RC202380**

## ALKBH8 (NM\_138775) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: ALKBH8 (NM\_138775) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: ALKBH8

Synonyms: ABH8; MRT71; TRM9; TRMT9; TRMT9A

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-Entry (PS100001)

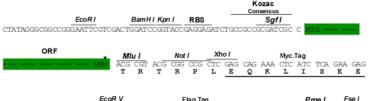
E. coli Selection: Kanamycin (25 ug/mL)

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 

Cloning sites used for ORF Shuttling:





	ECOR V							Flag. Tag								Pme I		rse i
GAT	CTG	GCA	GCA	AAT	GAT	ATC	CTG	GAT	TAC	AAG	GAT	GAC	GAC	GAT	AAG	GTT	TAA	ACGGCCGGCC
D	L	A	A	N	D	I	L	D	Y	K	D	D	D	D	K	v	Stop	

<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_138775

ORF Size: 714 bp



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**OTI Disclaimer:** 

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

**OTI Annotation:** 

This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:

Domains:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: NM 138775.1, NP 620130.1

RRM

RefSeq Size: 1685 bp RefSeq ORF: 1995 bp Locus ID: 91801 **UniProt ID:** Q96BT7 Cytogenetics: 11q22.3

**Protein Families:** 

MW: 27.3 kDa

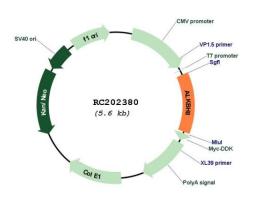
Druggable Genome



#### **Gene Summary:**

Catalyzes the methylation of 5-carboxymethyl uridine to 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in tRNA via its methyltransferase domain (PubMed:20123966, PubMed:20308323). Catalyzes the last step in the formation of 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in target tRNA (PubMed:20123966, PubMed:20308323). Has a preference for tRNA(Arg) and tRNA(Glu), and does not bind tRNA(Lys)(PubMed:20308323). Binds tRNA and catalyzes the iron and alphaketoglutarate dependent hydroxylation of 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in tRNA via its dioxygenase domain, giving rise to 5-(S)-methoxycarbonylhydroxymethyluridine; has a preference for tRNA(Gly) (PubMed:21285950). Required for normal survival after DNA damage (PubMed:20308323). May inhibit apoptosis and promote cell survival and angiogenesis (PubMed:19293182).[UniProtKB/Swiss-Prot Function]

### **Product images:**



Circular map for RC202380