

Product datasheet for RR207832L4V

OriGene Technologies, Inc.

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Alkbh3 (NM_001014180) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Alkbh3 (NM_001014180) Rat Tagged ORF Clone Lentiviral Particle

Symbol: Alkbh3

Mammalian Cell Puromycin

Selection:

Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_001014180

ORF Size: 885 bp

ORF Nucleotide

OTI Disclaimer:

The ORF insert of this clone is exactly the same as(RR207832).

Sequence:

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.

RefSeq: <u>NM 001014180.1</u>, <u>NP 001014202.1</u>

RefSeq Size: 1286 bp
RefSeq ORF: 888 bp
Locus ID: 362169
UniProt ID: Q5XIC8
Cytogenetics: 3q31







Gene Summary:

Dioxygenase that mediates demethylation of DNA and RNA containing 1-methyladenosine (m1A). Repairs alkylated DNA containing 1-methyladenosine (m1A) and 3-methylcytosine (m3C) by oxidative demethylation. Has a strong preference for single-stranded DNA. Able to process alkylated m3C within double-stranded regions via its interaction with ASCC3, which promotes DNA unwinding to generate single-stranded substrate needed for ALKBH3. Also acts on RNA. Demethylates N(1)-methyladenosine (m1A) RNA, an epigenetic internal modification of messenger RNAs (mRNAs) highly enriched within 5'-untranslated regions (UTRs) and in the vicinity of start codons. Requires molecular oxygen, alpha-ketoglutarate and iron.[UniProtKB/Swiss-Prot Function]