

## **Product datasheet for MC226019**

## Alkbh7 (NM\_027372) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Alkbh7 (NM\_027372) Mouse Untagged Clone

Tag: Tag Free Symbol: Alkbh7

**Synonyms:** 2310045B01Rik; 2510008E23Rik; Abh7; Spata11

**Mammalian Cell** 

Selection:

Neomycin

**Vector:** pCMV6-Entry (PS100001) **E. coli Selection:** Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC226019 representing NM\_027372

Red=Cloning site Blue=ORF Orange=Stop codon

 $\verb|TTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC|$ 

GCCGCGATCGCC

ATGGCGGGCAGCAGGAGGCTAGCGATGCGGTTGCTTTCTGGGTGCGCCTGGGTGCGCGGCTCAGACTCTG
CCGTGCTGGGCCGCCTGCGTGATGAGGCCGTGGTGCATCCAGGCTTCCTGAGCCAGGAGGAGGAGGACAC
GCTAACACGCGAACTGGAGCCCCAGCTGCGGCGCCGCGCGCTACGAGTACGACCACTGGGACGCGTTCTGT
GGATCTACCATTGCTGGCCTTTCCCTGTTGTCTCCAAGTGTTATGAAGCTGGTGCATACACAGGAACCTG
AGCAGTGGCTGGAACTGTTGCTGGAGCCAGGGTCTCTCTATATCTTAAGGGGTTCAGCCCGATATGACTT
CTCCCATGAGATCCTTAGAGATGAAGAATCATTTTTTTGGGGAGCCACGGGTTCCCCGGGGCCCGACGCATC
TCAGTGATTTGCCGCTCCCTCCCTGAGGGGATGGGGCCAGGAAGGCCAGAAGAGCCACCTCCAGCCTGCT

GΑ

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGATCTGGCAGCAAATGATATCC

 ${\tt TGGATTACAAGGATGACGACGATAAGGTTTAA}$ 

**Restriction Sites:** Sgfl-Rsrll

**ACCN:** NM\_027372

**Insert Size:** 492 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



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## Alkbh7 (NM\_027372) Mouse Untagged Clone - MC226019

**OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

**Components:** 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: NM 027372.1, NP 081648.1

17 D

 RefSeq Size:
 765 bp

 RefSeq ORF:
 492 bp

 Locus ID:
 66400

 UniProt ID:
 Q9D6Z0

Cytogenetics:

Gene Summary: May function as protein hydroxylase; can catalyze auto-hydroxylation at Leu-110 (in vitro), but

this activity may be due to the absence of the true substrate. Required to induce programmed necrosis in response to DNA damage caused by cytotoxic alkylating agents. Acts by triggering the collapse of mitochondrial membrane potential and loss of mitochondrial function that leads to energy depletion and cell death. ALKBH7-mediated necrosis is probably required to prevent the accumulation of cells with DNA damage. Does not display DNA demethylase activity (By similarity). Involved in fatty acid metabolism.[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) lacks an in-frame coding exon compared to variant 1. The

resulting isoform (2) lacks an internal protein segment compared to isoform 1.