

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
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC226019 representing NM_027372
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGCGGGCAGCAGGAGGCTAGCGATGCGGTTGCTTTCTGGGTGCGCCTGGGTGCGGGCTCAGACTCTG
 CCGTGTGGGCCCGCTGCGTGATGAGGCCGTGGTGCATCCAGGCTTCTGAGCCAGGAGGAGGAGACAC
 GCTAACACGCGAACTGGAGCCCCAGCTGCGGCGCGGCGCTACGAGTACGACACTGGGACGCGTTCTGT
 GGATCTACCATTGCTGGCCTTCCCTGTTGTCTCCAAGTGTATGAAGCTGGTGCATACACAGGAACCTG
 AGCAGTGGCTGGAAGTGTGCTGGAGCCAGGCTCTCTATATCTTAAGGGGTTAGCCCGATATGACTT
 CTCCCATGAGATCCTTAGAGATGAAGAATCATTTTTGGGGAGCACCGGGTCCCGGGGCCGACGCATC
 TCAGTGATTTGCCGCTCCCTCCCTGAGGGGATGGGGCCAGGAAGGCCAGAAGAGCCACCTCCAGCCTGCT
 GA

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-RsrII
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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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:	<ol style="list-style-type: none">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:	<u>NM_027372.1</u> , <u>NP_081648.1</u>
RefSeq Size:	765 bp
RefSeq ORF:	492 bp
Locus ID:	66400
UniProt ID:	<u>Q9D6Z0</u>
Cytogenetics:	17 D
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.