

## Product datasheet for **MG202934**

### Alkbh2 (NM\_175016) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Alkbh2
Synonyms:	9530023G02; Abh2; AU016977; mABH2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

**ORF Nucleotide Sequence:** >MG202934 representing NM\_175016  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGACAAGTTCCTGGTGAGGCCAGACCTCCGCGACCTCCAAGGGGAGGGGAGGAGCCCGCCCCGACGG  
GAGGAGCCTCGGGCGACCTGAAGAGCCCGGACTGGCGACACCTTCGCGCGGAAGGTCTGAGCTGTGATTA  
CACCGTCCTATTCGGCAAAGCCGAGGCAGACAAGATTTCCGAGAGTTGGAGCAAGAAGTGGAGTATTTT  
ACTGGTGCCTGGCCAAGGTCCAGGTGTTTCGAAAGTGGCACAGTGTCCAGGAAGCAGGGCAGCTATG  
GCGATGCTGGCCTCAGTACAGTTTTCTGGTCTTACCCTGACACCAAAGCCCTGGGTTCTGTTCTAGA  
GCGTGTTCGAGATCGAGTCTGCGAGGTGACAGGACAGACCTTCAACTTTGTAAGTCTGTAACAGGTACAAA  
GATGGTTGCGACCACATCGGCGAGCACAGAGATGACGAGCGAGAAGTGGCTCCGGGGAGCCCATCGCGT  
CTGTCTCCTTTGGCGCTTGCAGAGACTTCATTTCCGGCACAAAGACTCTCGAGGGAAGAGGCCCGGAG  
GACAGTGGAGGTGGTCAAGGCTGCAGCTGGCACACGGAAGCCTGCTGATGATGAACCCCAACCAACACC  
CACTGGTACCACAGTCTCCCCATCCGAAGAGGGTCTGGCTCCGGGGTCAACTTGACTTTTCGGAAAA  
TTTTACCTACTAAGAAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



**Protein Sequence:** >MG202934 representing NM\_175016  
 Red=Cloning site Green=Tags(s)

MDKFLVRPDLRDLQGGGEEPAPTGGASGDLKSPDWRHLRAEGLSCDYTVLFGKAEADKIFRELEQEVEYF  
 TGALAKVQVFGKWHSPRKQATYGDAGLTYTFSGLTLTPKPWVPVLERVRDRVCEVTGQTFNFVLVNRKY  
 DGDCHI GEHRDDERELAPGSPIASVSFGACRDFIFRHKDSRGRPRRTVEVVRLQLAHGSLMMNPPTNT  
 HWYHSLPIRKRVLAPRVNLTFRKILPTKK

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_175016

**ORF Size:** 717 bp

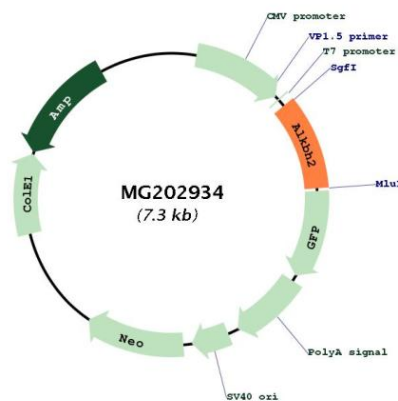
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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:** 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_175016.3</a>
<b>RefSeq Size:</b>	1148 bp
<b>RefSeq ORF:</b>	720 bp
<b>Locus ID:</b>	231642
<b>UniProt ID:</b>	<a href="#">Q6P6J4</a>
<b>Cytogenetics:</b>	5 F
<b>Gene Summary:</b>	Dioxygenase that repairs alkylated DNA and RNA containing 1-methyladenine and 3-methylcytosine by oxidative demethylation. Can also repair alkylated DNA containing 1-ethenoadenine. Has strong preference for double-stranded DNA. Has low efficiency with single-stranded substrates. Requires molecular oxygen, alpha-ketoglutarate and iron. [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG202934