

Product datasheet for RC212873

ALKBH3 (NM_139178) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALKBH3 (NM_139178) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ALKBH3
Synonyms:	ABH3; DEPC-1; DEPC1; hABH3; PCA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212873 representing NM_139178 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGAAAAAGACGGCGAGCCCGAGTTCAGGGAGCCTGGGCTGCCCTGTTAAAAGCCAGGCCATTG
CTCAGCCAGCTACCACTGCTAAGAGCCATCTCCACCAGAAGCCTGGCCAGACCTGGAAGAACAAGAGCA
TCATCTCTCTGACAGAGAGTTTGTGTTCAAAGAACCTCAGCAGGTAGTACGTAGAGCTCCTGAGCCACGA
GTGATTGACAGAGAGGGTGTGTATGAAATCAGCCTGTCACCCACAGGTGTATCTAGGGTCTGTTTGTATC
CTGGCTTTGTTGACGTGAAAGAAGCTGACTGGATATTGGAACAGCTTTGTCAAGATGTTCCCTGGAACA
GAGGACCGGCATCAAAGAGGATATAACTTATCAGCAACCAAGACTTACAGCATGGTATGGAGAATTCTCT
TACACTTATTCAGAATCACTATGGAACCAATCCTCACTGGCACCTGTGCTGCGCACACTAAAGAACC
GCATTGAAGAGAACACTGGCCACACCTTCAACTCCTTACTCTGCAATCTTTATCGCAATGAGAAGGACAG
CGTGGACTGGCACAGTGATGATGAACCCTCACTAGGGAGGTGCCCATTTGCTTCACTAAGTTTTGGT
GCCACACGCACATTTGAGATGAGAAAGAAGCCACCACCAGAAGAGAATGGAGAGTACACATATGTGGAAA
GAGTGAAGATACCCTTGGATCATGGGACCTTGTAATCATGGAAGGAGCGACACAAGCTGACTGGCAGCA
TCGAGTGCCCAAAGAATACCACTCTAGAGAACCAGAGTGAACCTGACCTTTCGGACAGTCTATCCAGAC
C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC212873 representing NM_139178
Red=Cloning site Green=Tags(s)

MEEKRRRARVQGAWAAPVKSQAIAPATTAKSHLHQKPGQTWKNKEHHLSDREFVFKEPQQVRRAPPEPR
 VIDREGVYEISL SPTGVS RVCLYPGFVDVKEADWILEQLCQDVPWKQRTGIKEDITYQQPRLTAWYGELP
 YTYSRITMEPNPHWHPVLR LTKNRIEENTGHTFN SLLCNLYRNEKDSVDWHSDDPE SLGRCP IIASLSFG
 ATRTFEMRKKPPPEENGEYTYVERVKIPLDHGTL LIMEGATQADWQHRVPKEYHSREPRVNLTFRTVYPD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6048_h12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_139178

ORF Size: 841 bp

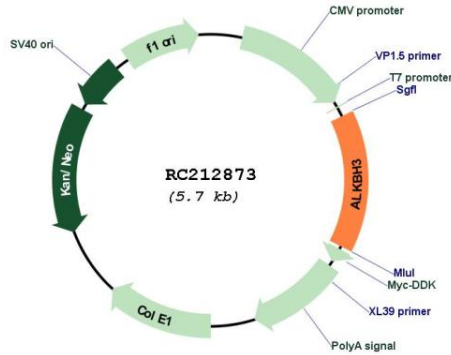
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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](#)

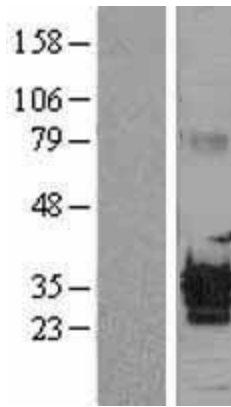
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:	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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq Size:	1520 bp
RefSeq ORF:	861 bp
Locus ID:	221120
UniProt ID:	Q96Q83
Cytogenetics:	11p11.2
Domains:	2OG-Fell_Oxy
Protein Families:	Druggable Genome
MW:	33.2 kDa
Gene Summary:	The Escherichia coli AlkB protein protects against the cytotoxicity of methylating agents by repair of the specific DNA lesions generated in single-stranded DNA. ALKBH2 (MIM 610602) and ALKBH3 are E. coli AlkB homologs that catalyze the removal of 1-methyladenine and 3-methylcytosine (Duncan et al., 2002 [PubMed 12486230]).[supplied by OMIM, Mar 2008]

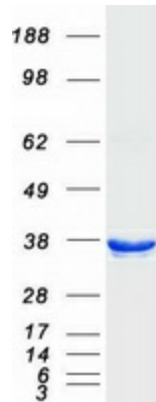
Product images:



Circular map for RC212873



Western blot validation of overexpression lysate (Cat# [LY403381]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212873 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ALKBH3 protein (Cat# [TP312873]). The protein was produced from HEK293T cells transfected with ALKBH3 cDNA clone (Cat# RC212873) using MegaTran 2.0 (Cat# [TT210002]).