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Product datasheet for SC127124

ALKBH5 (NM_017758) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALKBH5 (NM_017758) Human Untagged Clone
Tag:	Tag Free
Symbol:	ALKBH5
Synonyms:	ABH5; OFOXD; OFOXD1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC127124 sequence for NM_017758 edited (data generated by NextGen Sequencing)

ATGGCGGCCGCCAGCGGCTACACGGACCTGCGTGAGAAGCTCAAGTCCATGACGTCCCGG
GACAACTATAAGGCGGGCAGCCGGGAGGCCGCCGCCGCTGCCGCAGCCGCCGTAGCCGCC
GCAGCCGCAGCCGCCGCTGCCGCCGAACCTTACCCTGTGTCCGGGGCCAAGCGCAAGTAT
CAGGAGGACTCGGACCCCGAGCGCAGCGACTATGAGGAGCAGCAGCTGCAGAAGGAGGAG
GAGGCGCGCAAGGTGAAGAGCGGCATCCGCCAGATGCGCCTCTTCAGCCAGGACGAGTGC
GCCAAGATCGAGGCCCGCATTGACGAGGTGGTGTCCCGCGCTGAGAAGGGCCTGTACAAC
GAGCACACGGTGGACCGGGCCCCACTGCGCAACAAGTACTTCTTCGGCGAAGGCTACACT
TACGGCGCCCAGCTGCAGAAGCGCGGGCCCGGCCAGGAGCGCCTCTACCCGCCGGGCGAC
GTGGACGAGATCCCCGAGTGGGTGCACCAGCTGGTGATCCAAAAGCTGGTGGAGCACCGC
GTCATCCCCGAGGGCTTCGTCAACAGCGCCGTCATCAACGACTACCAGCCCGGCGGCTGC
ATCGTGTCTCACGTGGACCCCATCCACATCTTCGAGCGCCCCATCGTGTCCGTGTCCTTC
TTTAGCGACTCTGCGCTGTGCTTCGGCTGCAAGTTCCAGTTCAAGCCTATTCGGGTGTCG
GAACCAGTGCTTTCCCTGCCGGTGCGCAGGGGAAGCGTGACTGTGCTCAGTGGATATGCT
GCTGATGAAATCACTCACTGCATACGGCCTCAGGACATCAAGGAGCGCCGAGCAGTCATC
ATCCTCAGGAAGACAAGATTAGATGCACCCCGGTTGGAAACAAAGTCCCTGAGCAGCTCC
GTGTTACCACCCAGCTATGCTTCAGATCGCCTGTCAGGAAACAACAGGGACCCTGCTCTG
AAACCCAAGCGGTCCCACCGCAAGGCAGACCCTGATGCTGCCCACAGGCCACGGATCCTG
GAGATGGACAAGGAAGAGAACCGGCGCTCGGTGCTGCTGCCCACACACCGGCGGAGGGGT
AGCTTCAGCTCTGAGAACTACTGGCGCAAGTCATACGAGTCCTCAGAGGACTGCTCTGAG
GCAGCAGGCAGCCCTGCCCGAAAGGTGAAGATGCGGCGGCACTGA

Clone variation with respect to NM_017758.3

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_017758 unedited
GGATTTGTATACGACTTCTATAGGCGGCCGCGAATTCGGCACGAGGGGCCCCGGGGCGCG
TCCCCTTAGAGCCATGCCCGGCTGCCCCGCCCGCCCCGGAGGACCCTAGAGCAGCGTCGT
GGGGGCCATGGCGGCCGCCAGCGGCTACACGGACCTGCGTGAGAAGCTCAAGTCCATGAC
GTCCCGGGACAACTATAAGGCGGGCATCTCGGGAGGCCGCCGCCGCTGCCGCAGCCGCCG
TAGCCGCCGCAGCCGCAGCCGCCGCTGCCGCCGAACCTTACCCTGTGTCCGGGGCCAAGC
GCAAGTATCAGGAGGACTCGGACCCCGAGCGCAGCGACTATGAGGAGCAGCAGCTGCAGA
AGGAGGAGGAGGCGCGCAAGGTGAAGAGCGGCATCCGCCAGATGCGCCTCTTCAGCCAGG
ACGAGTGCGCCAAGATCGAGGCCCGCATTGACGAGGTGGTGTCCCGCGCTGAGAAGGGCC
TGTACAACGAGCACACGGTGGACCGGGCCCCACTGCGCAACAAGTACTTCTTCGGCGAAG
GCTACACTTACGGCGCCCAGCTGCAGAAGCGCGGGCCCGGCCAGGAGCGCCTCTACCCGC
CGGGCGACGTGGACGAGATCCCCGAGTGGGTGCACCAGCTGGTGATCCAAAAGCTGGTGG
AGCACCGCGTCATCCTCGAGGGCTTCGTCAACAGCGCCGTCATCAACGACTACCACGCCC
GCCGCCTGCATCGTGTCTCACGTGGACCCCATCCCCATCTTCGAGCGCCCCATCGTGTCC
GTGTCCTTCTTTACCGACTCTGCGCTGTGCTTCNGNTGCAAGNTCCAGTCAAGCCTATTC
GGGTGTCGGAACCAGTGCTTTCCCTGCCGGGCCCAAGGGAAACGTGACTGGGCTCACCGG
TAAGCTGCTGAGAAATCCTCATGCATACGCCTCAGAACTAAGGACGCCCGCAGACCTATC
TTCAGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_017758 unedited
NCCTTTAGCTCTGGACCGCGGCCCGCATNCTAGGATCGAGTTTTTTTTTTTTTTTTTTAA
AAATATTAGATTTGGTTTTTATTGTAGAGCACACATATCAGGGCGAAGTGCTGCACACAC
AACTACAAATCATTTTTGGGAAAAAAGCTGTAAAAAAAATAAAACTGCAACTGCTTTAAT
TATGCAGTCCCGACTTGAGAAATCCACGCTGGCAAAGGAGTTCTGGCCCCTGAGAGGGGC
TTCTTGATGGTGGCTGCCCCAGATTTCTGCAGCCTATGAGGTCTCAGACCCGGACCTCTG
TACACAAAGCCCCCAAAGTGGTGGTATCCTGGTTGCTGGGAGGGCCTCTGCTCTTGGCAA
GCCCGGGTCCTGGCCTGGCTGACAAGAAGACATTCCTAATGAATCTAGATCCACAAAACC
TTGCTGCCTTCCAGGATCTGAGTGGATAGAAGCTACCAAAGACTTTACCTTTTTTTTCTT
ATTATTTTTTGAAAGCCCCTTCACCAACTCCCATACCCTGAAGCGGAGGAGGCACCAGCC
CAGTCTGCAGGCCTGAGCTCTGGCCTTGGATGCATGCTGCCGGCAGACAAGATGGGGCAG
GCGCCTTCCTAGAAGGATGACATGAGGATGAGGCCCAAGCTGGCCAGTGGAGAAGGGAAG
GGAAAGGAAAAAGCCAGGAGACTAAAGGGGGAAAAAAAACTCAAAAAAGAACACAAAAAC
CCTACCACACACCACAACAATTTTCCATACCCCCAATGCTAGACTTGGCAGGACACCAGT
CCCTCTAGCTAGAAACATTTCTAAACTGACCCAACGTGGCAAGTCTAACTGTTCCCAATA
ATCACACGCATATTGCTCAAAANAGCCACCAGCAAAAAGTGTGCTCTTGATAAGAAAG

Restriction Sites: NotI-NotI

ACCN: NM_017758

Insert Size: 2800 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).

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.
RefSeq:	NM_017758.2, NP_060228.2
RefSeq Size:	2992 bp
RefSeq ORF:	1377 bp
Locus ID:	54890
UniProt ID:	Q6P6C2
Cytogenetics:	17p11.2
Domains:	2OG-FeII_Oxy
Gene Summary:	Dioxygenase that demethylates RNA by oxidative demethylation: specifically demethylates N(6)-methyladenosine (m6A) RNA, the most prevalent internal modification of messenger RNA (mRNA) in higher eukaryotes (PubMed:23177736, PubMed:24489119, PubMed:24616105, PubMed:24778178). Can also demethylate N(6)-methyladenosine in single-stranded DNA (in vitro) (PubMed:24616105). Requires molecular oxygen, alpha-ketoglutarate and iron (PubMed:21264265, PubMed:23177736, PubMed:24489119, PubMed:24616105, PubMed:24778178). Demethylation of m6A mRNA affects mRNA processing and export (PubMed:23177736). Required for the late meiotic and haploid phases of spermatogenesis by mediating m6A demethylation in spermatocytes and round spermatids: m6A demethylation of target transcripts is required for correct splicing and the production of longer 3' UTR mRNAs in male germ cells (By similarity).[UniProtKB/Swiss-Prot Function]