

## Product datasheet for MC224431

### Kdm6a (NM\_009483) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Kdm6a (NM_009483) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Kdm6a
Synonyms:	Utx
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC224431 representing NM_009483 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAATCCTGCGGAGTGTCTGCTACCGCCGCCGCCGCCGCCGCCGCCGCTTTCGGTGATGAGG  
AAAAGAAAATGGCGGCGGGAAAAGCGAGCGGCGAGAGCGAGGAGGCGTCCCCAGCCTGACAGCGGAGGA  
GAGGGAGGCGCTCGGCGGACTGGACAGCCGCTTTTCGGGTTCTGAGGTTTCATGAAGATGGCGCCAGG  
ATGAAGGCCCTGTGGCAAGGCTGTTCTGCTACGAATCTCTAATCTTAAAAGCTGAAGGAAAAGTGG  
AGTCTGATTTCTTTGTCAATTAGTCACTTCAACCTCTTATTGGAAGATTATCCAAAAGCATTATCTGC  
ATACCAGAGGTAACAGTTTACAGTCTGATTACTGGAAGAATGCTGCCTTTTTATGGTCTTGGTTTG  
GTCTACTTCCATTACAATGCATTTCACTGGGCTATTAAAGCATTTCAGGAGGTGCTTTATGTCTGATCCCA  
GCTTTTGTCTGAGCCAAGGAAATTCATTTACGACTTGGGCTTATGTTCAAAGTGAACACAGACTATGAGTC  
TAGTTTAAAGCATTTTCAGTTAGCTTTGGTTGACTGTAATCCCTGCATTTGTTCAATGCTGAAATTCAG  
TTTCACATTGCCCACTTATGAAACCCAGAGGAAGTATCATTCTGCAAAAAGAAGCTTATGAGCACTTT  
TGCAGACAGAAAACCTTCTGCACAAGTAAAAGCAACTATTTACAACAATTAGGTTGGATGCATCACAC  
TGTGGATCTCCTGGGAGATAAAGCCACCAAGGAAAGTTATGCTATTCAAGTATTCAGAAAGTTCAGG  
GCAGATCCAAATCTGGCCAGTCTGGTATTTCTTGGAAAGGTGCTATTCAAGTATTCAGAAAGTTCAGG  
ATGCCTTTATATCTTACAGGCAATCTATTGATAAATCAGAAGCAAGTGCAGATACATGGTGTTCATAGG  
TGTGCTCTATCAACAGCAAAATCAGCCTATGGATGCTTTGCAAGCTTATATTTGTGCTGTACAATTGGAC  
CACGGTCTGCTGAGCCTGGATGGATCTAGGCACTCTCTATGAATCCTGCAACCAACCTCAGGATGCTA  
TTAAATGCTATTTAAATGCAACTAGAAGCAAAAATTTAGTAAATACCTCTGGACTTGCAGCACGAATTA  
GTATTTACAGGCTCAGTTGTGTAACCTTCCACAAGGTAGTCTACAGAATAAACTAAATTAATCTCTAGT  
ATTGAGGAGGCATGGAGCCTACCAATCCCCGAGAGCTTACCTCCAGGCAGGGTGCCATGAACACAGCAC  
AGCAGAATACTTCTGATAATTGGAGTGGTGGCAATGCACCACCTCCAGTAGAACAACAACTCATTATG  
GTGTTTGACACCACAGAAATTACAGCACTTGAACAGCTCCGAGCAAACAGAAATAATTTAAATCCAGCA



CAGAAACTAATGCTGGAACAGCTGGAAAGTCAGTTTGTCTTAATGCAGCAACACCAATGAGACAAACAG  
 GAGTTGCACAGGTACGGCCTACTGGAATTCCTAATGGGCCAACAGTTGACTCATCTGCCTACAAACTC  
 AGTTTCTGGCCAGCAGCCACAGCTTCTCTGACCAGAAATGCCTAGTGTCTCTCAGCCTGGAGTCCACT  
 GCCTGTCTAGGCAGACTTTGGCCAATGGACCTTTTCTGCAGGCCATGTTCCCTGTAGCACATCAAGAA  
 CACTGGGAAGTACAGACTGTTTTGATAGGCAATAATCATGTAAACAGGAAGTGAAGTAATGGAAACGT  
 GCCTTACCTGCAGCGAAACGCACCCACTACCTCATAACCGCACAACTGACCAGCAGCACAGAGGAG  
 CCGTGGAAAACCAACTATCTAACTCCACTCAGGGGCTTACAAAGGTCGAGTTCACATTTGGCAGGTC  
 CTAATGGTGAACGACCTCTATCTCCACTGGGCCTTCCAGCATCTCCAGGCAGCTGGCTCTGGTATTCA  
 GAATCAGAATGGACATCCCACCCTGCCTAGCAATTCAGTAACACAGGGGGCTGCTCTCAATCACCTCTCC  
 TCTCACACTGCTACCTCAGGTGGACAACAAGGCATTACCTTAACCAAAGAGAGCAAGCCTTCAGGAAACA  
 CATTGACGGTGCCTGAAACAAGCAGGCAAACTGGAGAGACACCTAACAGCACTGCCAGTGTGAGGGACT  
 TCCTAATCATGTCCATCAGGTGATGGCAGATGCTGTTGTCAGTCTAGCCATGGAGATTCTAAGTACCA  
 GGTTTACTAAGTTCAGACAATCCTCAGCTCTGCTTGTGATGGGAAAAGCTAATAACAATGTGGGTC  
 CTGGAACCTGTGACAAAGTCAATAACATCCACCAACTGTCCATACAAAGACTGATAATTCTGTTGCCCTC  
 TTACCATCTTCAGCCATTTCCACAGCAACACCTTCTCCTAAGTCCACTGAACAGACAACCACAAACAGT  
 GTTACCAGCCTTAACAGCCCTCAGAGTGGGCTGCACACAATTAATGGAGAAGGAATGGAAGAATCTCAGA  
 GCCCATTAATAACAGATCTGCTTCTAGTTAGCCACAGACCTAGTCTCAGATCATACCATCAATGTCTGT  
 GTCCATATATCCCAGCTCAGCAGAAGTTCTGAAAGCTTGCAAGAACTAGGTAATAACCGCCTGTCTAAT  
 AGTAGCATTCTGTTGGATAAATGTCGCGCTCCAAGACCACCATCCTCACCATACCCTCCCTTGCCAAAGG  
 ACAAGTTGAATCCACCTACACCTAGTATTTATTTGGAAAATAAACGTGATGCTTTCTTCCCTCCATTACA  
 TCAATTTGTACAAACCAACAACCTGTTACAGTAATACGTGGCCTTGCTGGAGCTCTAATTAGAC  
 TTGGGACTTTTCTACTAAAATTTGGTGAAGCTAACAAATGAACATATGGTAGAAGTGAGGACACAGT  
 TGTACAACCCAGCAGATGAAAATTTGGACCCCTACTGGAACCAAGAAAATCTGCACTGTGAAAGTAATAG  
 ATCTCATACTACAATTGCTAAAATGCTCAGTACCAGGCCTCCTCATTCCAAGAATCATTGAGAGAAGAA  
 AATGAGAAAAGAAGTACCATAAAGACCACTCAGACAGTGAATCTACATCATCAGATAATTCTGGGAAAA  
 GAAGAAAAGGACCCTTTAAAACCATTAAGTTTGGGACCAACATTGACCTGTCTGATGACAAAAAGTGAA  
 GTTACAGCTACATGAGCTGACTAACTTCTGCTTCTGAGAGTTGATCTGCAGGAAATCTTTAAGC  
 CAGGTCATCAAGAAAATAACAACCTTCTGTTCAAGTAAATAAATATTGGCCAGGTGACTGTGAATGGTT  
 TGTTGTTCTGAAGGCTACTGGGTGTTTTGAATGACTTCTGTGAAAAAATAATTTGAATTTCTAATG  
 GGTCTTGGTGGCCACCTTGAAGATCTATATGAAGCAATGTTCCAGTGTATAGTTTATTACAGCGAC  
 CTGGAGATCTGGTCTGGATAAATGCTGGCACTGTTCAATGGGTTCAAGCTATTGGCTGGTCAACAATAT  
 TGCTTGAATGTTGGTCCACTTACAGCCTGTCAAGTATAAGTTAGCAGTGAACGTTATGAATGGAACAAG  
 TTGCAAAATGTAAGTCAATAGTACCATGTTTCTTCTGGAATATGGCACGAAATATCAAGGTTT  
 CAGATCCAAAGCTTTTTGAAATGATTAAGTATTGTCTTCTGAGAAGCTGAAGCAATGTCAGACATTGAG  
 GGAAGCTTAATTGCTGCAGGAAAAGAGATCATATGGCACGGCGGACAAAAGAAGAACAGCTCATTAT  
 TGTAGTATTTGTGAGGTGGAGGTTTTGATCTGCTTTTGTCACTAATGAGAGTAATTCTCGAAAAACCT  
 ACATAGTACATTGCCAAGATTGTGCACGAAAAACAAGTGGGAATCTGGAAAATTTTGGTGTCTAGAACA  
 GTACAAAATGGAGGATCTGATGCAAGTCTATGACCAATTTACATTAGTAAGTGAATCAACATGCTCCTC  
 CATTACCATCCGCTCATCTTGATATTGTTCCATGGACATTAACATGAGACCTTTTCTGCTATTACAGAA  
 AGTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2352\\_f02.zip](https://cdn.origene.com/chromatograms/ja2352_f02.zip)

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_009483

**Insert Size:** 4275 bp

<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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>RefSeq:</b>	<a href="#">NM_009483.1</a> , <a href="#">NP_033509.1</a>
<b>RefSeq Size:</b>	5309 bp
<b>RefSeq ORF:</b>	4275 bp
<b>Locus ID:</b>	22289
<b>UniProt ID:</b>	<a href="#">O70546</a>
<b>Cytogenetics:</b>	X 13.45 cM
<b>Gene Summary:</b>	<p>Histone demethylase that specifically demethylates 'Lys-27' of histone H3, thereby playing a central role in histone code. Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-27'. Plays a central role in regulation of posterior development, by regulating HOX gene expression. Demethylation of 'Lys-27' of histone H3 is concomitant with methylation of 'Lys-4' of histone H3, and regulates the recruitment of the PRC1 complex and monoubiquitination of histone H2A (By similarity). Plays a demethylase-independent role in chromatin remodeling to regulate T-box family member-dependent gene expression (PubMed:21095589).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer protein (isoform 1).</p>