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Product datasheet for MG211981

Kdm6a (NM_009483) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kdm6a (NM_009483) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kdm6a
Synonyms:	Utx
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG211981 representing NM_009483
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAATCCTGCGGAGTGTCGCTCGCTACCGCCGCCGCCGCCGCCGCCGCCGCTTTCGGTGATGAGG
AAAAGAAAATGGCGGCGGGAAAAGCGAGCGGCGAGAGCGAGGAGGCGTCCCCCAGCCTGACAGCGGAGGA
GAGGGAGGCGCTCGGCGGACTGGACAGCCGCCTTTTCGGGTTCGTGAGGTTTCATGAAGATGGCGCCAGG
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CAGAAACTAATGCTGGAACAGCTGGAAAGTCAGTTTGTCTTAATGCAGCAACACCAAATGAGACAAACAG
GAGTTGCACAGGTACGGCCTACTGGAATTCTTAATGGGCCAACAGTTGACTCATCACTGCCTACAAACTC
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GTACAAAATGGAGGATCTGATGCAAGTCTATGACCAATTTACATTAGTAAGTGAAATCAACATGCTCCTC
CATTACCATCCGCCTCATCTTGATATTGTTCCATGGACATTAAACATGAGACCTTTTCTGCTATTCAGAA
AG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG211981 representing NM_009483
Red=Cloning site Green=Tags(s)

MKSCGVSLATAAAAAAAAAFGDEEKKMAAGKASGESEEASPSLTAEEREALGGLDSRLFGFVRFHEDGAR
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FHIAHLYETQRKYHSAKEAYEQLLQTENLSAQVKATILQQLGWMHHTVDLLGDKATKESYAIQYLQKSLE
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LGLFSTKTLVEANNEHMVEVRTQLLQPADENWDPTGTKKIWHCESNRSHTTIAKYAQYQASSFQESLREE
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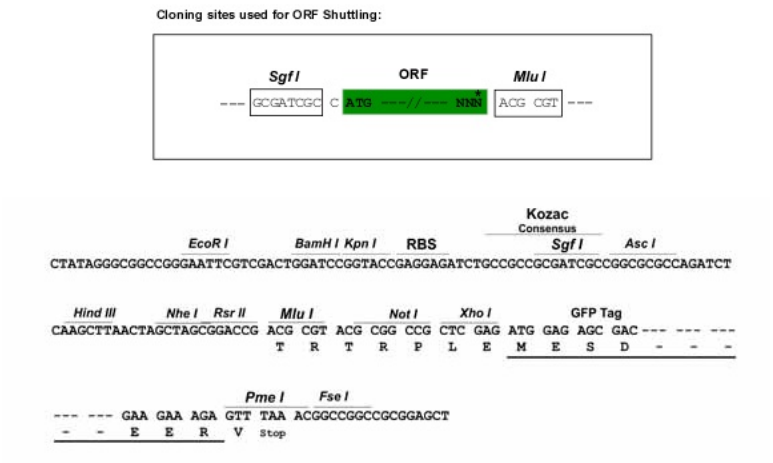
LQNVKSIVPMVHLSWNMARNIKVSDPKLFEMIKYCLLRTLKQCQTLREALIAAGKEIIWHGRTKEEPAHY
CSICEVEVFDLLFVTNESNSRKTYIVHCQDCARKTSGNLENFVVLEQYKMEDLMQVYDQFTLVSEINMLL
HYHPPHLDIVPWTLNMRPFLLFRK

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009483

ORF Size: 4272 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:
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_009483.2

RefSeq Size: 5309 bp

RefSeq ORF: 4275 bp

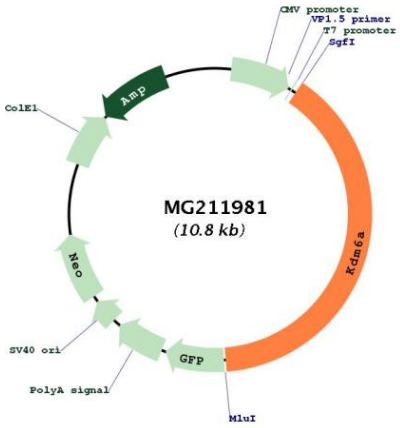
Locus ID: 22289

UniProt ID: O70546

Cytogenetics: X 13.45 cM

Gene Summary: 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]

Product images:



Circular map for MG211981