

Product datasheet for **MR221543**

Kdm7a (NM_001033430) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kdm7a (NM_001033430) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kdm7a
Synonyms:	A630082K20Rik; BB041802; ENSMUSG00000073143; Jhdm1d; mKIAA1718
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>MR221543 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

 ATGATCGAGTGGCATGTCTGCAAGGACTGGTTCACGGCAGCTGTGTTGGCGTGAAGAGCATCATGCTG
TGGACATTGACCTGTACCACTGCCCGGACTGTGCAGCTCTACACGGCTCTTCCTTAATGAAGAAGAGGAG
GAACTGGCACAGGCATGACTACACAGAAGTGATGATGGCTCCAAACCTGTTCAAGCTGGAAGTACGGCC
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GGTGGAGGTTCTGATATAGCCAGAAAACCTTTCATGGGTGAAAAATTACTGGCCAGATGATTCAGTCTTC
CCCAAGCCCTTTGTCCAGAAATCTGCTTAATGGGAGTTCAAGATAGCTATACAGATTTCCACATTGACT
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CTTCGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
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Protein Sequence: >MR221543 protein sequence
Red=Cloning site Green=Tags(s)

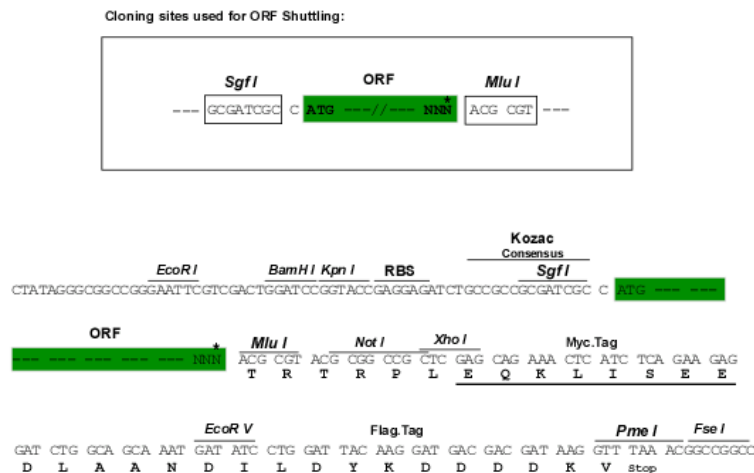
MIECDVCKDWFHGSVCVGVVEEHAVDIDL YHCPDCAALHGSSLMKKRRNWHRHDYTEVDDGSKPVQAGTRA
FVKELRSRVFPSADEIIVKMHGSQLTQRYLEKHGFDVPIVVKLDDLGLRLPSPAFSVMVERYVGGDKV
IDVIDVARQADSKMTLHNYVKYFMNPDPRPKVLNVISLEFSDTKMSELVEVPDIARKLSWVENYWPDDSVF
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ICWVFAKSLLETLKELKEDGFQPQSYLVQGVKALHTALKLWMKKELVSEHAFEIPDNVRPGHLIKELSKV
IRAIEEENGKPKVKSQGIPSVCPVSRPSNEASPPYHSRRKMRKLRDHNVRTPSNLDILELHTREVLKRLEM
CPWEEDLLSSKLNKGNKHLQPSSTVPEWRAKDNDLRLLLTNGRIKDERQLFADRSLYTADSENEEDKK
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ESSGDEKKHEITSHFKEESDVRNLLQKSQKPSRQEIPVKRECPSTSTEEEAIIQGMLSMAGLHYSSCLQ
RQIQSTDCSGEKNLQDPSSCHGSNPEFRQLYRCNKPVEFGYHAKTEDQDLMTSSWNKQFDRTSRFNAQD
LSRSQKHKKESSEINQKAQSRHCVDNSSSSIQNGKYTLNPSLVSCQISNGSLSPERPIGETSFMSPLH
PTKRPASNPPIISNQATKGKRPKKGMATAKQRLGKILKLNRRNGHARFFV

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Restriction Sites:

SgfI-MluI

Cloning Scheme:

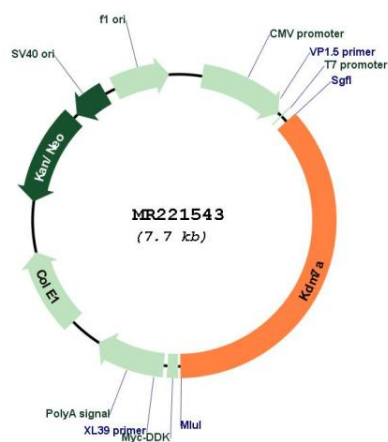


* The last codon before the Stop codon of the ORF

ACCN: NM_001033430

ORF Size:	2667 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).
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001033430.3 , NM_001033430.4 , NP_001028602.2
RefSeq Size:	9553 bp
RefSeq ORF:	2823 bp
Locus ID:	338523
UniProt ID:	Q3UWM4
Cytogenetics:	6 B1
MW:	101.3 kDa
Gene Summary:	Histone demethylase required for brain development. Specifically demethylates dimethylated 'Lys-9' and 'Lys-27' (H3K9me2 and H3K27me2, respectively) of histone H3 and monomethylated histone H4 'Lys-20' residue (H4K20Me1), thereby playing a central role in histone code. Specifically binds trimethylated 'Lys-4' of histone H3 (H3K4me3), affecting histone demethylase specificity: in presence of H3K4me3, it has no demethylase activity toward H3K9me2, while it has high activity toward H3K27me2. Demethylates H3K9me2 in absence of H3K4me3. Has activity toward H4K20Me1 only when nucleosome is used as a substrate and when not histone octamer is used as substrate (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR221543