

## Product datasheet for **RG239974**

### **KDM6A (NM\_001291421) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KDM6A (NM_001291421) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KDM6A
Synonyms:	bA386N14.2; KABUK2; UTX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG239974 representing NM_001291421. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCATCACACTGTAGATCTCCTGGGAGATAAAGCCACCAAGGAAAGCTATGCTATTCAGTATCTCCAA
AAGTCCTTGAAGCAGATCCTAATCTGGCCAGTCCTGGTATTTCTCGGAAGGTGCTATTCAAGTATT
GGGAAAGTTCAGGATGCCTTTATATCTTACAGGCAGTCTATTGATAAATCAGAAGCAAGTGCAGATACA
TGGTGTTCATAGGTGTCTATATCAGCAGCAAAATCAGCCCATGGATGCTTTACAGGCCTATATTTGT
GCTGTACAATTGGACCATGGCCATGCTGCAGCCTGGATGGACCTAGGCACTCTCTATGAATCCTGCAAC
CAGCCTCAGGATGCCATTAATGCTACTTAAATGCAACTAGAAGCAAAAGTTGTAGTAATACCTCTGCA
CTTGACAGCACGAATTAAGTATTTACAGAATACTTCTGACAATTGGAGTGGTGGACATGCTGTGCACAT
CCTCCAGTACAGCAACAAGCTCATTTCATGGTGTGGTACACCACAGAAATTACAGCATTGGAAACAGCTC
CGCGCAATAGAAATAATTTAAATCCAGCACAGAACTGATGCTGGAACAGCTGGAAAGTCAGTTTGTGTC
TTAATGCAACAACACCAATGAGACCAACAGGAGTTGCACAGGTACGATCTACTGGAATTCCTAATGGG
CCAACAGCTGACTCATCACTGCCTACAACTCAGTCTCTGGCCAGCAGCCACAGCTTGTCTGACCAGA
GTGCCTAGCGTCTCTCAGCCTGGAGTCCGTCCTGCCTGCCCTGGGAGCCTTTGGCCAATGGACCCCTT
TCTGCAGGCCATGTTCCCTGTAGCACATCAAGAACGCTGGGAAGTACAGACACTATTTGATAGGCAAT
AATCATATAACAGGAAGTGAAGTAATGGAAACGTGCCCTTACCTGCAGCGAAACGCACTCACTACTCT
CATAACCGCACAAACCTGACCAGCAGCGCAGAGGAGCCGTGGAAAAACCAACTATCTAACTCCACTCAG
GGGCTTCAAAAGGTGAGAGTTCACATTCGGCAGGTCCCTAATGGTGAACGACCTCTCTCTCCACTGGG
CCTTCCAGCATCTCCAGGCAGCTGGCTCTGGTATTCAGAATCAGAACGGACATCCACCCTGCCTAGC
AATTCAGTAACACAGGGGCTGCTCAATCACCTCTCTCTCACACTGTACCTCAGGTGGACAACAA
GGCATTACCTTAACCAAGAGAGCAAGCCTTCAGGAAACATATTGACGGTGCCTGAAACAAGCAGGCAC
ACTGGAGAGACACCTAACAGCACTGCCAGTGTGAGGGACTTCTAATCATGTCCATCAGATGACGGCA
GATGCTGTTTGCAGTCTAGCCATGGAGATTCTAAGTACCAGGTTTACTAAGTTCAGACAATCCTCAG
CTCTGCTTGTGATGGGAAAAGCCAATAACAATGTGGTACTGGAACCTGTGACAAAGTCAATAAC
```



[View online >](#)

ATCCACCCAGCTGTTTCATACAAAGACTGATAACTCTGTTGCCTCTTCACCATCTTCAGCCATTTCAACA  
 GCAACACCTTCTCCAAAATCCACTGAGCAGACAACCACAAACAGTGTTACCAGCCTTAACAGCCCTCAC  
 AGTGGGTACACACAATTAATGGAGAAGGGATGGAAGAATCTCAGAGCCCATGAAAACAGATCTGCTT  
 CTGGTTAACACAAAACCTAGTCCACAGATCATACCATCAATGTCTGTGTCCATATACCCAGCTCAGCA  
 GAAGTTCTGAAGGCATGCAGGAATCTAGGTAATAATGGCTTATCTAACAGTAGCATTGTTGGATAAA  
 TGTCACCTCCAAGACCACCATCTTACCATACCCTCCCTTGCCTAAAGGACAAGTTGAATCCACCTACA  
 CCTAGATTACTTGAATAAAGCTGATGCTTTCTTCTCCATTACATCAATTTGTACAAATCCG  
 AACAAACCCTGTTACAGTAATACGTGGCCTTGTGGAGCTCTTAAGTTAGACCTGGGACTTTTCTCTACT  
 AAAAATTTGGTGAAGCTAACAATGAACATATGGTAGAAGTGAGGACACAGTTGTTGCAGCCAGCAGAT  
 GAAAACCTGGGATCCCACTGGAACAAAGAAAATCTGGCATTGTGAAAGTAATAGATCTCATACTACAATT  
 GCTAAATATGCACAGTACCAGGCCTCCTCATTCCAGGAATCATTGAGAGAAGAAAATGAAAAAGAAGT  
 CATCATAAAGACCACTCAGATAGTGAATCTACATCGTCAGATAATTCTGGGAGGAGGAGAAAGGACCC  
 TTTAAACCATAAAGTTGGGACCAATATTGACCTATCTGATGACAAAAGTGGAAGTTGCAGCTACAT  
 GAGCTGACTAACTTCTGCTTTTGTGCGTGTCTGATCAGCAGGAAATCTTCTAAGCCATGTTGGTCAT  
 ACCATATTGGGCATGAACACAGTTCAACTATACATGAAAGTTCCAGGGAGCAGAACCAGGTCATCAG  
 GAAAATAACAACCTCTGTTTCAGTTAACATAAATATTGGCCAGGTGACTGTGAATGGTTTGTGTTCTCT  
 GAAGGTTACTGGGGTGTCTGAATGACTTCTGTGAAAAAATAATTTGAATTTCTAATGGGTTCTTGG  
 TGGCCCAATCTTGAAGATCTTTATGAAGCAATGTTCCAGTGTATAGGTTTATTGAGCGACTGGAGAT  
 TTGGTCTGGATAAATGCAGGCCTGTTCAATGGGTTCCAGGCTATTGGCTGGTGAACAACATTGCTTGG  
 AATGTTGGTCCACTTACAGCCTGCCAGTATAAATGGCAGTGAACGGTACGAATGGAACAAATTGCAA  
 AGTGTGAAGTCAATAGTACCCATGGTTCATCTTCTGGAATATGGCAGCAAATATCAAGGTCTCAGAT  
 CCAAAGCTTTTGAATGATTAAGTATTGTCTTCTAAGAACTCTGAAGCAATGTCAGACATTGAGGGAA  
 GCTCTCATTGCTGCAGGAAAAGAGATTATATGGCATGGGCGGACAAAAGAAGAACCAGCTCATTACTGT  
 AGCATTTGTGAAGTGGAGTTTTTGTCTGCTTTTGTCACTAATGAGAGTAATTCACGAAAGACTTAC  
 ATAGTACATTGCCAAGATTGTGCACGAAAAACAAGCGAAACTTGAAAACTTTGTGGTGTAGAACAG  
 TACAAAATGGAGGACCTGATGCAAGTCTATGACCAATTTACATTAGCTCCTCCATTACCATCCGCTCA  
 TCT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC

**Protein Sequence:**

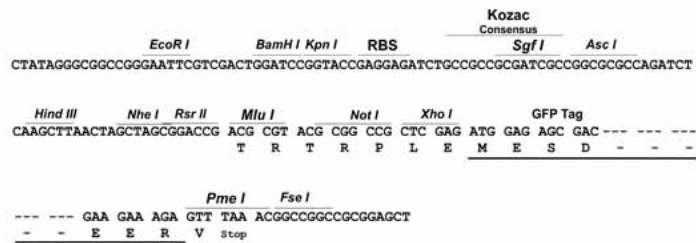
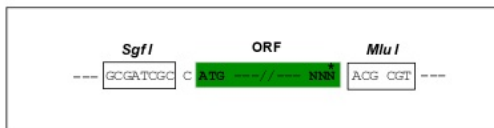
>Peptide sequence encoded by RG239974  
 Blue=ORF Red=Cloning site Green=Tag(s)

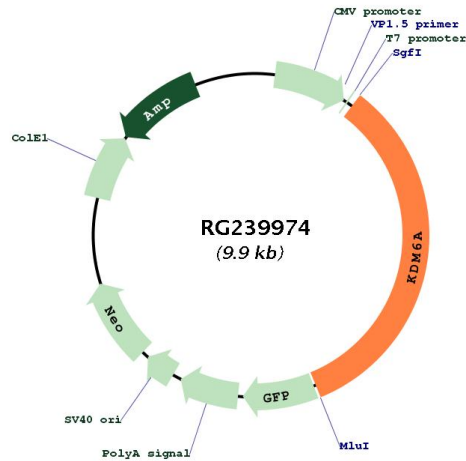
MHHTVDLLGDKATKESYAIQYLQKSLLEADPNSGQSWYFLGRYSSIGKVQDAFISYRQSIDKSEASADT  
 WCSIGVL YQQNQPM DALQAYICAVQLDHGHAAMWDLGTLYESCNQPQDAIKCYLNATRSKSCSNTSA  
 LAARIKYLQNTSDNWSGGHAVSHPPVQQQAHSWCLTPQKLQHLQLRANRNNLNPQKLMLEQLESQFV  
 LMQQHMRPTGVAQVRSTGIPNGPTADSSLPTNSVSGQQPQLALTRVPSVSQPGVRPACPGQPLANGPF  
 SAGHVPCSTSRTLGSTDITLIGNNHTGSGSNGNVPYLQRNALTLPHNRTNLTSSAEEPWKNQLSNSTQ  
 GLHKGQSSHSAGPNERPLSSTGPSQLQAAGSGIQNQNGHPTLPSNSVTQGAALNHLSSHTATSGGQQ  
 GITLTKESKPSGNILTVPETSRHTGETPNSTASVEGLPNHVHMTADAVCSPSHGDGSKSPGLLSSDNPQ  
 LSALLMGKANNVGTGCDKVNNIHPAVHTKTDNSVASSPSSAISTATPSPKSTEQTNTSVTSLNSPH  
 SGLHTINGEGMEESQSPMKDLLLLVNHKPSPIIPSMSVSIYPSSAEVLKACRNLGKNGLSNSSILLDK  
 CPPPRPPSPYPLPKDKLNPPTPSIYLENKRDAFFPPLHQFCTPNPNPVTVIRLAGALKLDLGLFST  
 KTLVEANNEHMVEVRTQLLQPADENWDPTGKKIWHCESNRSHTTIAKYAQYQASSFQESLREENEKRS  
 HHKDHSDSESTSSDNGRRRKGPFKTIKFGTNIIDLSDDKKWLQLHELTKLPAFVRVVSAGNLLSHVGH  
 TILGMNTVQLYMKVPGSRTPGHQENNNFCSVNIINIGPDCEWFVPEGYWGVLNDFCEKNNLNFMLGWSW  
 WPNLEDLYEANVPYRFIQRPGDLVINAGTVHWVQAIWGNIIANVVGPLTACQYKLAVERYWNKLQ  
 SVKSIIVPMVHLSWNMARNIKVSDPKLFEMIKYCLLRTLKQCQTLREALIAGKEI IWHGRKEEPAHC  
 SICEVEVFDLLFVTNESNRKTYIVHCQDCARKTSGNLENFVLEQYKMEDLMQVYDQFTLAPPLPSAS  
 S  
 TRTRPLEMESDESGLPAMEIECRITGLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKAISHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_001291421

**ORF Size:** 3315 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).

**RefSeq:** [NM\\_001291421.1](#), [NP\\_001278350.1](#)

**RefSeq Size:** 5529 bp

**RefSeq ORF:** 3318 bp

**Locus ID:** 7403

**Cytogenetics:** Xp11.3

**MW:** 121.6 kDa

**Gene Summary:** This gene is located on the X chromosome and is the corresponding locus to a Y-linked gene which encodes a tetratricopeptide repeat (TPR) protein. The encoded protein of this gene contains a JmjC-domain and catalyzes the demethylation of tri/dimethylated histone H3. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Apr 2014]