

Product datasheet for **MR214772**

AU022751 (NM_001166433) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AU022751 (NM_001166433) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AU022751
Synonyms:	AU023811
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR214772 representing NM_001166433, **codon optimized**.
Due to the complexity of NM_001166433, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

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

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGCCAGCTCCTCCTCCCAGAGCGGGGGCTGGAAGCACTGCGAGATACTGATGAGAGCGAGGGCGAAG
 CACCTGGACCGTCAGGCCGAGAGGCAGGGGAGGGCCTTACAGGGCCGGTTCTGCACTTCGGTTGAGATC
 CCTGGAAGCTGAAATGGCCGCCGCTTTCGTTACCTCAACTGCAGGTGAGGACTTGGGAACCTTTCCGAG
 CCAGGCTCACAGCATGGGGATCCCGAGGGCGGGGTGGGCCTGACCTTGAAGTGGGGCACGCTAGACCAA
 TGATGCGGAGTCAAAGAGAGTTGGGCCTCACACCTAAAGCGGAGGAAAGGCAGATCAGGGCGGGAAGGG
 CAGGAAGGGCGGGAGCGGTAGCCCCCTCATACCAAGAGCTCCCGAAAAGAGGGAACAGCCTAACCCCAAT
 CGATCACTGATGGCTCAGGGGGCAGCTGGACCCCAATTGCCCGCGCACGAGGCAGTCTGCTATGCCCC
 AACCCGAGAGTAGCCTCTCTCCAGGCCTGATCAGTCTCACCAATTTGACTTCCCGTCGGGAATCTGGA
 GGCACCCGGGCCAACCTGAGGTCCAGTACCAGTCAGGGATCTGGGAGCACCCCGTCCAGAAGCCCTG
 AGGTGCGCTGAGAGTAGCCGAGCCGAAAGCGACCAGTCTAGTCCCGGGGAGAGAGCTTCGGCAGCAGG
 CTTCTCCCGAGCCCTGACGATGATGATGATGGAGATGGAGGCCCTGATCCACGGGGCAGCGGGACACC
 AGAAGGATGGGTACTGCGCAGCGGTGTGGTGCCTTTCGGTAGGGCAGCTCTGCCAGTGAAGTGAAGTCCC
 GAGGAGGTGAGGCCTGAGGCTCAATGTACAGGCTGGAACCTCAGACCCGGCCAAGATCAAGCGCTTCAG
 CAGTGTACCCAGAGGCTCGGCCTAAAGCGCAATCCGCCGGTAGAAATCTGCGGCCTCGGCCGCGCAGTAG
 TGCCCTCAGTGGTCACTCCGGAAGCACGGCCAAAGCACAGAGTGTGGCCGCAACCTCCGCCAAGACCC
 AGGAGCTCTGCGTCAGTTGTATCTCCTGAGGCCAGGCCGAGGCACAGAGCGCCGGACGCAATCTTCGAC
 CTCGAGCCACCCAGAGTTCTGTGCGCACCGAGCTCTACCACTAGAAGTCCAGTGACAGAGGTTCTTC
 ACGCGCCCCAGATCTAGGTCCAGATCCAGATCATGCAGCACACCTCGGCTGGGGTCTGATCATCAGAGA
 TCTCGAAAAATTAAGATGCGACTGGACCTGCAAGTCGATCGGAAACCGGAGTCCGAAGCGGAGCAAGAGG
 AACAGGAACTTGAGTCTGAGCCCGTCCCTCCTCCGCCACAGGCTTCTAGAAGCAGCAGCAGATTTC
 CGTCCCCGGGAGATCTTCTGCGCCGAGAAGATTCACCGCCTAGAAGACCGGTCCGGATGAGGGCTAGC
 TCTCCCTCACCACCAGGTGCTTGTACCACTCCCTAAGCACTACTTCGAAGGGGTGCACTCCCCAAGCT
 CATCTAGTAGCGAGAGCTCTTCCGTTAGTAGCAGTCATAGCCCCCTCAATAAGGCTCCTGACCCTGGTTC
 CTCCCCTCCTCTGAGTAGCCTTTCAGGTCTAACCCCTTCTGGTTGGCTCTGATCGCCGACCTGGACAAT
 CTGGATTCCAGCAGTCCAGGGTGCCTGGCGAGGAGATCGAGGCTGCACCTCACACACGAGAGGAGGAAG
 ATAAGAAGTGCCGGGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

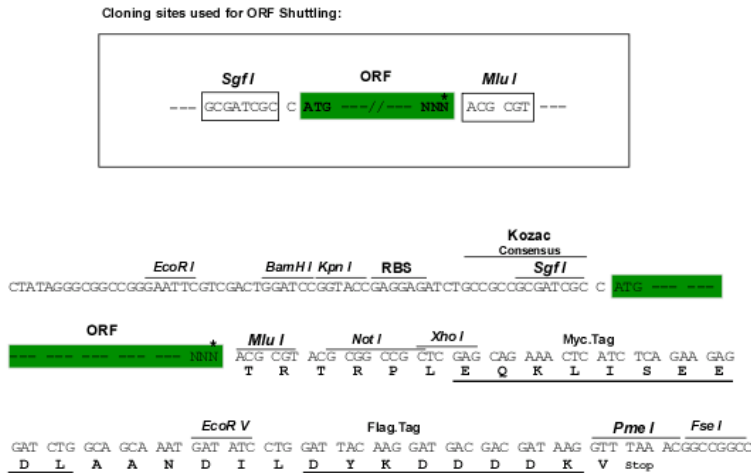
Protein Sequence: >MR214772 representing NM_001166433
 Red=Cloning site Green=Tags(s)

MASSSSPERGLEALRDTDESEGEAPGPSGPRGRGGPSGAGSALRLRSLEAEMAAACVTSTAGEDLGTTFSE
 PGSQHGDPEGGGPDLELGHARPMMSQRELGLTPKGGKADQGGKGRKGGSGSPHTKSSRKREQPNPN
 RSLMAQGAAGPPLPGARGSPAMPQPESLSRPDQSHHFDFVGNLEAPGPTLRSSTSQSGSTPVPEAL
 RCAESSRAESDQSSPAGRELQQASPRAPDDDDGDGGDPPRGSGTPEGWVLRSGVVPFGRRSSASEVSP
 EEVVPEAQTGNLPRPRSSASAVSPEARPKAQSAQRNLRPRPRSSASVVVSPPEARPKAQSAQRNLRPR
 RSSASVVVSPPEARPAQSAQRNLRPRATPRVPVAPSSSTRSSDRGSSRAPRSRSRSCSTPRLGSDHQR
 SRKIKMRDLQVDREPESEAEQEEQEELESEPGPSSRPQASRSSRFVAVPGRSSLAEDSPRRPVRMRAS
 SPSPGRGLYLKHYFEGVHSPSSSSSESSVSSSHSPLNKAPDGGSPPLSSLGPNPFWLALIADLDN
 LDSSSPRVPGEEIEAAPHTREREEDKKCRG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



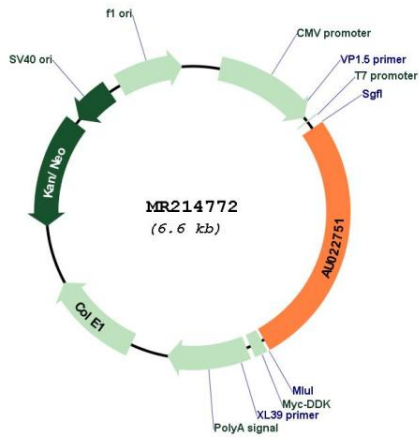
* The last codon before the Stop codon of the ORF

ACCN: NM_001166433

ORF Size: 1767 bp

OTI Disclaimer:	<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 custsupport@origene.com 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. More info</p>
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:	<ol style="list-style-type: none"> 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_001166433.1 , NP_001159905.1
RefSeq Size:	2203 bp
RefSeq ORF:	1770 bp
Locus ID:	102991
UniProt ID:	Q3UWZ4
Cytogenetics:	X A1.1
MW:	61.8 kDa
Gene Summary:	<p>Inhibits PRC2/EED-EZH1 and PRC2/EED-EZH2 complex function by inhibiting EZH1/EZH2 methyltransferase activity, thereby causing down-regulation of histone H3 trimethylation at 'Lys-27' (H3K27me3) (PubMed:31086175). Probably inhibits methyltransferase activity by limiting the stimulatory effect of cofactors such as AEBP2 and JARID2 (By similarity). Inhibits H3K27me3 deposition during spermatogenesis and oogenesis (PubMed:31451685). [UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR214772