

## Product datasheet for MR223300

### Set (NM\_023871) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Set (NM_023871) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Set
Synonyms:	2610030F17Rik; 5730420M11Rik; AA407739; I-2PP2A; StF-IT-1; TAF-I
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR223300 representing NM_023871 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCCCGAAGCGGCAGTCTGCGATCCTGCCTCAGCCCAAGAAACCCAGACCGGCTGCTGCCCGAAGC  
TGGAGGACAAGTCGGCCTCTCCCGCCTGCCGAAGGGAGAAAAAGAACAGCAAGAAGCAATTGAACATAT  
TGATGAAGTACAAAATGAAATAGACAGACTTAATGAACAAGCCAGTGAGGAAATTTGAAAGTAGAACAA  
AAATATAACAACTCCGCCAACATTTTTTCAGAAGAGGTCAGAATTGATCGCCAAAATCCCAAATTTTT  
GGGTAACAACATTTGTCAACCATCCACAAGTGTCTGCACTGCTTGGGGAGGAGGACGAGGAGGCTCTGCA  
TTATTTGACCAGATTGAAGTGACAGAATTTGAAGACATTAATCAGTTACAGAATAGATTTTTATTTT  
GATGAAAATCCTTACTTTGAAAATAAAGTTCTCTCCAAAGAATTTTCATCTGAACGAGAGTGGTGACCCGT  
CTTCAAAGTCCACCGAAATCAAATGAAAATCTGGAAAGGATTTGACAAAACGCTCAAGTCAAACGAAAA  
TAAGGCCAGCAGGAAGAGGCAGCACGAAGAGCCAGAGAGCTTCTTTACCTGGTTTACTGACCATCTGAC  
GCAGGTGCTGATGAGTTAGGAGAGGTCATCAAAGATGACATCTGGCCAAATCCCTTGCACTACTCTGG  
TTCCCACATGGATGATGAAGAAGGAGAGGCAGAAGATGATGATGACGACGACGAAGAGGAGGGGCT  
GGAAGATATTGATGAAGAAGGAGATGAGGATGAAGGTGAAGAAGATGACGATGAGGATGAAGGGGAGGAA  
GGAGAGGAGGACGAAGGCCGAGGATGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR223300 representing NM\_023871  
 Red=Cloning site Green=Tags(s)

MAPKRQSAILPQPKKPRPAAAPKLEDKSASPGLPKGEKEQQEAIEHIDEVQNEIDRLNEQASEEILKVEQ  
 KYNKLRQPFQKRSELIKIPNFVWTTFNHPQVSALLGEEDEEALHYL TRVEVTEFEDIKSGYRIDFYF  
 DENPYFENKVLKSEFHLNESGDPSSKSTEIKWKSCKDL TKRSSQTQNKASRKRQHEEPESFFTFWTDHSD  
 AGADELGEVIKDDIWPNPLQYYLVPDMDDEEAGEEDDDDDDEEEGLEIDEEGDEDEGEEDDDEDEGEE  
 GEEDEGEDD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9035\\_a07.zip](https://cdn.origene.com/chromatograms/mm9035_a07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_023871

**ORF Size:** 867 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.

**RefSeq:** [NM\\_023871.4](#), [NP\\_076360.1](#)

**RefSeq Size:** 2698 bp

**RefSeq ORF:** 870 bp

**Locus ID:** 56086

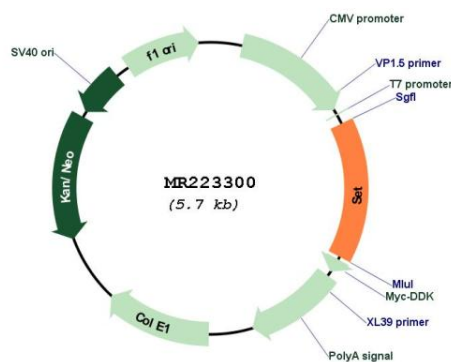
**UniProt ID:** [Q9EQU5](#)

**Cytogenetics:** 2 B

**MW:** 33.8 kDa

**Gene Summary:** Multitasking protein, involved in apoptosis, transcription, nucleosome assembly and histone chaperoning. Isoform 2 anti-apoptotic activity is mediated by inhibition of the GZMA-activated DNase, NME1. In the course of cytotoxic T-lymphocyte (CTL)-induced apoptosis, GZMA cleaves SET, disrupting its binding to NME1 and releasing NME1 inhibition. Isoform 1 and isoform 2 are potent inhibitors of protein phosphatase 2A. Isoform 1 and isoform 2 inhibit EP300/CREBBP and PCAF-mediated acetylation of histones (HAT) and nucleosomes, most probably by masking the accessibility of lysines of histones to the acetylases. The predominant target for inhibition is histone H4. HAT inhibition leads to silencing of HAT-dependent transcription and prevents active demethylation of DNA. Both isoforms stimulate DNA replication of the adenovirus genome complexed with viral core proteins; however, isoform 2 specific activity is higher (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR223300