

## Product datasheet for **MR205874**

### Ring1 (NM\_009066) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ring1 (NM_009066) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ring1
Synonyms:	Ring1A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205874 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATGGTACAGAGATTGCGGTTTCGCCTCGGTCACTGCATTCTGAGCTCATGTGTCCCATCTGCCTGG  
ACATGCTGAAGAACAACAATGACCACCAAGGAGTGCCTGCATAGGCTCTGCTCGGACTGCATCGTACC  
CCTGCGGAGCGGGAACAAGGAGTGCCCTACCTGCCGAAAAAGCTGGTATCCAAGCGGTCCCTACGGCCG  
GACCCCAACTTCGACGCCCTGATCTCCAAAATCTACCCTAGCCGGGAGGAATATGAGGCCATCAGGACC  
GGGTGCTCATCCGCTCAGCCGCTGCACAACCAGCAGGCGCTGAGCTCCAGTATCGAGGAAGGGCTCCG  
GATGCAGGCCATGCACAGGGCCAGCGTGTGAGGCGGCCGATGCCTGGATCTGATCAGACCGCCACAATG  
AGTGGGGGGAAGGAGAACCTGGGGAGGGAAGGGGATGGAGAGGATGTAAGCTCTGACTCCGCCCCAG  
ACTCTGCTCCAGGCCCTGCTCCCAAGCGACCCCGCGGAGCGGGTGCAGGGGCCAGCAGTGTAGGGACAGG  
GGGTGGGGCTGCTGGTGGGGCTTGCAGGGGTGCCGTTCTGAAGACTCTGGTGACCGGGGCGCACCCCTG  
GGAGGGGAACCTGGGGCCCCAAGCCCTCCTGGGGCCCCAGCCCTCCAGAGCCCGGTGGAGAGATTG  
AGCTTGTGTTCCGGCCCCATCCCTGCTTGTGGAGAAAGGAGAGTACTGCCAGACTCGGTACGTGAAGAC  
TACTGGGAATGCCACAGTGGATCATCTCTCCAAGTACCTGGCCCTGCGCATTGCCCTGGAGAGGAGGCAG  
CAGCAGGAAACCGCAGAGCCCGGAGGGCCTGGTGGGGTGCTTCGACACAGGCGGACCTGATGGGGTG  
GTGGGGAGAGAGCGTTGCCGGAGGAGGCGAAGTCTGAGGAGCCTGCGCTCCCGAGCCTGGAAGGTGT  
CAGCGAAAAGCAGTACACCATCTACATCGCTCCTGGGGCGGAGCGTTCCAGACGCTGAATGGATCACTG  
ACCTTGGAGCTTGTAAACGAGAAGTTCTGGAAGGTGTCCAGGCCCTTAGAGCTCTGCTATGCCCCACGA  
AGGACCCAAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205874 protein sequence  
 Red=Cloning site Green=Tags(s)

MDGTEIAVSPRSLHSELMCPICLDMLKNTMTTKECLHRLCSDCIVTALRSGNKECPTCRKKLVSKRSLRP  
 DPNFDALISKIYPSREEYEAHQDRVLIRLSRLHNQALSSSIEEGLRMQAMHRAQVRRPMPGSDQTATM  
 SGGEGEPGEGEGDGEDVSSDSAPDSAPGPAPKRPRGAGAGASSVGTGGGAAGGACGGAGSEDSGDRGGTL  
 GGGLGPPSPPGAPSPPEPGGEIELVFRPHLLVEKGEYCQTRYVKTGNATVDHL SKYLALRIALERRRQ  
 QQETAEPGGPGGASDTGGPDGGGGERGVAGGGEGPEEPALPSLEGVSEKQYTIYIAPGGGAFTTLNGSL  
 TLELVNEKFWKVSRLPLELCYAPTKDPK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_009066

**ORF Size:** 1134 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\\_009066.2](#), [NP\\_033092.2](#)

**RefSeq Size:** 2048 bp

**RefSeq ORF:** 1221 bp

**Locus ID:** 19763

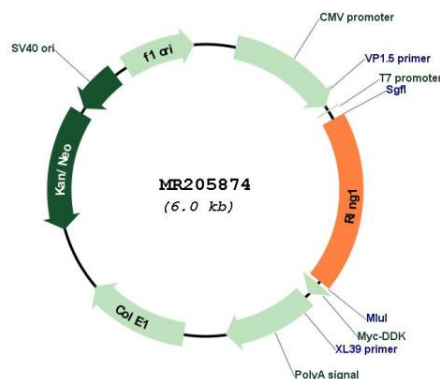
**UniProt ID:** [O35730](#)

**Cytogenetics:** 17 B1

**MW:** 39.3 kDa

**Gene Summary:** Constitutes one of the E3 ubiquitin-protein ligases that mediate monoubiquitination of 'Lys-119' of histone H2A, thereby playing a central role in histone code and gene regulation. H2A 'Lys-119' ubiquitination gives a specific tag for epigenetic transcriptional repression and participates in X chromosome inactivation of female mammals. Essential component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones, rendering chromatin heritably changed in its expressibility. Compared to RNF2/RING2, it does not have the main E3 ubiquitin ligase activity on histone H2A, and it may rather act as a modulator of RNF2/RING2 activity (By similarity).[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MR205874