

## Product datasheet for MR217153

### Exo5 (NM\_028457) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Exo5 (NM_028457) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Exo5
Synonyms:	3110037116Rik; AV297100; Dem1; Exo V; mExo5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR217153 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTGAGACTGGGAAGAGGAGACAGCATCAGCAGAAGCCTCAGGGTTTTCAGACTTGAGTGA  
AGTTAGTTGAATTTCTGGATCTGGAAGAAGCCAAAGAATCGGCTGTTTCACTTAGCAAGCCTGGCCCTTC  
TGCTGAATCCCTGGGAAGGATGACAAACCAGTAAGCTTGCAACTGAAAGGGGGATTGGATGTCTTG  
TCACCCATGGAGAGATCCACCTGAAATATTTATATGTCAGTACCTGTGCACTCAGAAGTGGTGTGAGT  
TGCAGATGGTGTACGGGAAGGAGCTTCTGGTTGTTGACACCTGAGAAAGCAGCTGTTTTGGACTGG  
TGCTAGCATCCACCTAGCAAAGAACTAGAATTCATGACCTTGTGACAGTCCCCATCGCCACAAAAGAA  
GATGCTTGGGCAGTTAAGTTTCTGAACATACTAGCAATGATTCCTGCCCTACAGTCGGAAGGGCGGTC  
GAGAGTTTCCAGTGTGGGGAGGTGGAGGGAATATTTCTTGGTGGAGTCATTGATGAGTTGCACTACAC  
ATCCAAGGGGAACTAGAGCTGGCTGAAGCAAGACGAAAGCGCCCGTGGTCCCCCTGCCAGCTCAG  
AAAAAGAAAGACTATTTCAAGTTAGCCTATACAAATATATCTTTGATGCCATGGTACAAGGAAAGTGA  
CTCCTGTAGCCTAATCCACCACCTAAATTTGTGTCTAGACAAGCAAGTGGACCTTCTGTGCTGAGGCA  
TGCCAGACAAGGAGGCGTGTCTGTAATACTTTGGGTGACCTTATGGAAGTGGTTTTCTGTCTCTTACA  
CTGTCTGATCTCCAGCTATTGATACCCTAAAACCTTGAGTATCCATCAAGAGACTGCCATATACTGG  
GCACAGAGATTGTAGCCTTTGAAGAGAAGGAAGTGAAGAAGCAAGGTGCAGCATTACGTGGCCTACTGGAT  
GGGCCACCGAGATCCTCAAGCGTTGATGTGGAGGAGGCATGGAAGTGCCGGACCTGTGACTATGTGGAC  
ATCTGCGAGTGGAGGAGGGCAGTGGAGTGCTCAGCTCATCGTGGAGGCCAAAGCCAAGAAGTTTAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR217153 protein sequence  
 Red=Cloning site Green=Tags(s)

MAETGEEETASAEASGFSDLSDSELVEFLDLEEAKESAVSLSKPGPSAELPGKDDKPVSLQNWKGGDLVLS  
 SPMERFHLKYL YVTDLCTQNWCELQMVYKELPGSLTPEKAAVLDTGASIHlakeleLHDLVTVPIATKE  
 DAWAVKFLNILAMIPALQSEGRVREFPVFGEVEGIFLVGVIDELHYTSKGELELAELKTRRRPVLPAPQ  
 KKKDYFQVSLYKYIFDAMVQGVTPASLIHHTKLCCLKPLGPSVLRHARQGGVSVKSLGDLMELVFLSLT  
 LSDLPAIDTLKLEYIHQETATILGTEIVAFEKEVKSKVQHYVAYWMGHRDPQGVVVEEAWKCRTCDYVD  
 ICEWRRGSGVLSSSWEPKAKKFK

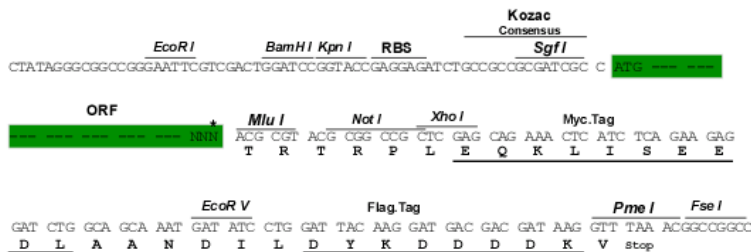
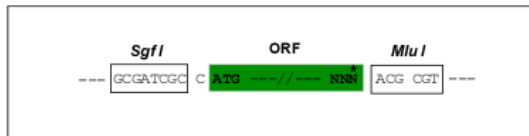
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_028457

**ORF Size:** 1122 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\\_028457.2](#), [NP\\_082733.1](#)

**RefSeq Size:** 1990 bp

**RefSeq ORF:** 1122 bp

**Locus ID:** 73172

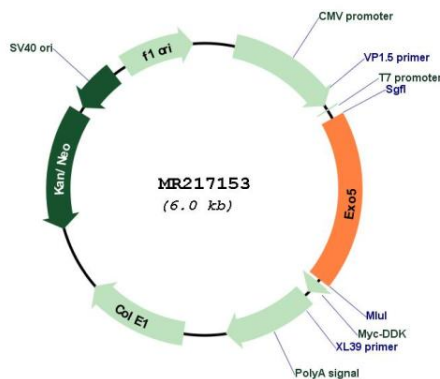
**UniProt ID:** [Q9CXP9](#)

**Cytogenetics:** 4 D2.2

**MW:** 41.6 kDa

**Gene Summary:** Single-stranded DNA (ssDNA) bidirectional exonuclease involved in DNA repair. Probably involved in DNA repair following ultraviolet (UV) irradiation and interstrand cross-links (ICLs) damage. Has both 5'-3' and 3'-5' exonuclease activities with a strong preference for 5'-ends. Acts as a sliding exonuclease that loads at ssDNA ends and then slides along the ssDNA prior to cutting; however the sliding and the 3'-5' exonuclease activities are abolished upon binding to the replication protein A (RPA) complex that enforces 5'-directionality activity (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR217153