

## Product datasheet for **MR208453**

### Cat (NM\_009804) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cat (NM_009804) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cat
Synonyms:	2210418N07; Cas-1; Cas1; Cs-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>MR208453 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTCGGACAGTCGGGACCCAGCCAGCAGCAGCAGATGAAGCAGTGAAGGAGCAGCGGGCCTCGCAGAGAC  
 CTGATGTCTGACCACCGAGGCGGGAACCAATAGGAGATAAACTTAATATCATGACCGGGGTTCCCG  
 AGGGCCCTCCTCGTTCAGGATGTGGTTTTCACTGACGAGATGGCACACTTTGACAGAGAGCGGATTCTCT  
 GAGAGAGTGGTACACGCAAAAGGAGCAGGTGCTTTGGATACTTTGAGGTCACCCACGATATCACCAGAT  
 ACTCCAAGGCAAAGGTGTTTGGCATATTGAAAGAGGACCCCTATTGCCGTTGATTCTCCACAGTCGC  
 TGGAGAGTCAGGCTCAGCTGACACAGTTCGTGACCCTCGGGGTTTGCAGTGAATTTTACTACTGAAGAT  
 GGTAACGGGATCTTGTGGAAACAACACCCTATTTTCTTCATCAGGGATGCCATATTGTTTCCATCCT  
 TTATCCATAGCCAGAAGAGAAACCCACAGACTCACCTGAAGGATCCTGACATGGTCTGGGACTTCTGGAG  
 TCTTCGTCGCCGAGTCTCCATCAGTTTTCTTTCTTGTTCAGTGACCGAGGGATTCCCGATGGTCACCGG  
 CACATGAATGGCTATGGATCACACACCTCAAGTTGGTTAATGCAGATGGAGAGGAGTCTATTGCAAGT  
 TCCATTACAAGACCGACCGAGGATCAAAAACCTGCTGTTGGAGAGGCAGGAAGGCTTGCTCAGGAAGA  
 TCCGGATTATGGCCTCCGAGATCTTTTCAATGCCATCGCCAATGGCAATTACCCGTCCTGGACGTTTTAC  
 ATCCAGGTCATGACTTTTAAAGGAGCAGAACTTTCCATTTAATCCATTTGATCTGACCAAGGTTTGGC  
 CTCACAAGGACTACCCTTTATACCAGTTGGCAAACCTGGTTTTAAACAAAAATCCAGTTAATTACTTTGC  
 TGAAGTTGAACAGATGGCTTTTGACCAAGCAATATGCCCCCTGGCATCGAGCCAGCCCTGACAAAATG  
 CTTCAGGGCCGCTTTTTGCCTACCCGGACACTACCCGCCACCGCTGGGACCAACTATCTGCAGATAC  
 CTGTGAACGTGCCATCCGCGCTCGAGTGGCAACTACCAGCTGATGGCCCCATGTGCATGCATGACAA  
 CCAGGGTGGTGCCTCAACTATTACCCCAACAGCTTCAGCGCACAGAGCAGCAGCGCTCAGCCCTGGAG  
 CACAGCGTCCAGTGCCTGTAGATGTGAAACGCTTCAACAGTGCTAATGAAGACAATGCTACTCAGGTGC  
 GGACATTTACACAAAGGTGTTGAACGAGGAGGAGAGGAAACGCCTGTGTGAGAATTGCCGGCCACT  
 GAAGGACGCTCAGCTTTTCATTACAGAAAGCGGTCAAGAATTTCACTGACGTCCACCCTGACTATGGG  
 GCCCGCATCCAGGCTCTTCTGGACAAGTACAACGCTGAGAAGCCTAAGAAGCAATTACACCTACACGC  
 AGGCCGGCTCTCATATGGCTGCGAAGGGAAAAGCTAACCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR208453 protein sequence  
 Red=Cloning site Green=Tags(s)

MDSRDPASDQMKQWKEQRASQRPDVL TTGGGNPIGDKLNIMTAGSRGPLLVQDVVFTDEMAHFDRERIP  
 ERVVHAKGAGAFGYFEVTHDITRYSKAKVFEHIGKRTPIAVRFSTVAGESGSADTVRDPRGFVAVFYTED  
 GNWDLVGNNTPIFFIRDAILFSPFIHSQKRNPQTHLKDPDMVWDFWSLRPELHQVSFLFSDRGIPDGRH  
 HMNGYGSHTFKLVNADGEAVYCKFHYKTDQGIKNLPVGEAGRLAQEDPDYGLRDLFNAIANGNYPSWTFY  
 IQVMTFKEAETFPFNPFDLTKVWPHKDYPLIPVGLVNLKNPVNYFAEVEQMAFDPSNMPPGIEPSPDKM  
 LQGRLFAYPDTHRHRLGPNYLQIPVNCYPYRVRVANYQRDGPMMHDNQGAPNYYPNSFSAPEQQRSALE  
 HSVQCAVDVKRFNSANEDNVTQVRTFYTKVLNEEERKRLCENIAGHLKDAQLFIQKAVKNFTDVHPDYG  
 ARIQALLDKYNAEKPKNAIHTYQAGSHMAAKGKANL

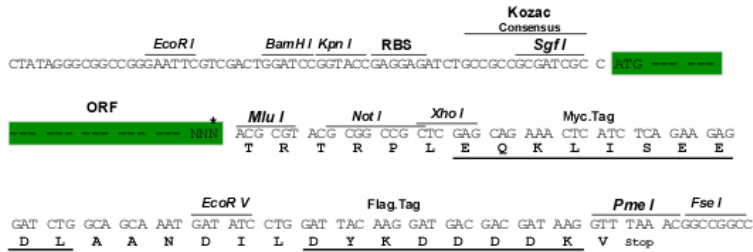
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

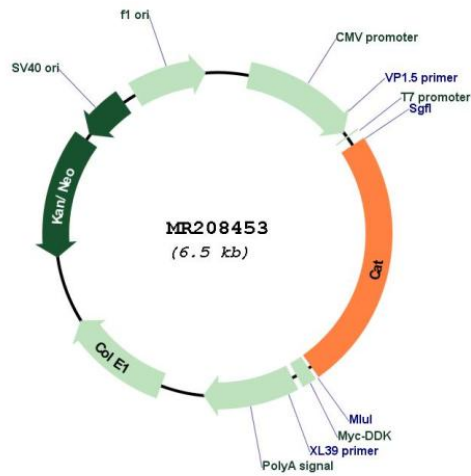
Cloning Scheme:

Cloning sites used for ORF Shutting:



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

Plasmid Map:



<b>ACCN:</b>	NM_009804
<b>ORF Size:</b>	1584 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_009804.1</a> , <a href="#">NM_009804.2</a> , <a href="#">NP_033934.1</a>
<b>RefSeq Size:</b>	2551 bp
<b>RefSeq ORF:</b>	1584 bp
<b>Locus ID:</b>	12359
<b>UniProt ID:</b>	<a href="#">P24270</a>
<b>Cytogenetics:</b>	2 54.43 cM
<b>MW:</b>	59.8 kDa
<b>Gene Summary:</b>	Occurs in almost all aerobically respiring organisms and serves to protect cells from the toxic effects of hydrogen peroxide. Promotes growth of cells.[UniProtKB/Swiss-Prot Function]