

Product datasheet for **RR211879**

Cat (NM_012520) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cat (NM_012520) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cat
Synonyms:	Cas1; Cat01; CatI; Cs-1; CS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RR211879 representing NM_012520
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGGACAGCCGGGACCCAGCCAGCAGCAGCAGATGAAGCAGTGAAGGAGCAGCGGGCCCTCAGAAAC
 CCGATGTCTGACCACCGAGGCGGGAACCAATAGGAGATAAACTTAATATCATGACTGCGGGGCCCG
 AGGGCCCTCCTCGTTCAAGATGTGGTTTTACCGACGAGATGGCACACTTTGACAGAGAGCGGATTCT
 GAGAGAGTGGTACATGCAAAGGAGCAGGTGCTTTGGATACTTTGAGGTCAACCACGATATTACCAGAT
 ACTCCAAGGCAAAGGTGTTGAGCATATTGGGAAGAGGACTCCTATTGCCGTCCGATTCTCCACAGTCGC
 TGGAGAGTCAGGCTCAGCTGACACAGTTCGTGACCCTCGTGGGTTGCAGTAAAATTCTACACTGAAGAT
 GGTAACTGGGACCTGTGGAAACAACACCCTATTTTCTTCATCAGGGATGCCATGTTGTTCCATCCT
 TTATCCATAGCCAGAAGAGAAACCCACAACTCACCTGAAGGACCCTGACATGGTCTGGGACTTCTGGAG
 TCTTTGTCAGAGTCTCCATCAGTTACTTTCTTGTTCAGCGACCGAGGGATTCCAGATGGACATCGG
 CACATGAATGGCTATGGCTCACACACCTCAAGCTGGTTAATGCGAATGGAGAGGCAAGTGTACTGCAAGT
 TCCATTACAAGACTGACCAGGGCATCAAAAACCTGCTGTTGAAGAGGCAGGAAGACTTGACACAGGAAGA
 CCCGGATTATGGCCTCCGAGATCTTTCAATGCCATCGCCAGTGGCAATTACCCATCCTGGACTTTTAC
 ATCCAGGTCATGACTTTCAAGGAGGCAGAAACCTCCCATTTAATCCATTGACCTGACCAAGGTTTGGC
 CTCACAAGGACTACCCTTTATACCAGTTGGCAAACCTGGTCTTAAACAGAAAATCTGTAATATTTTGC
 TGAAGTTGAACAGATGGCTTTTGACCAAGCAACATGCCCCCTGGCATTGAGCCCAGCCCGACAAGATG
 CTCCAGGGCCGCTTTTGTGTTACCCAGACACTACCCGCCCGCTGGGACCAAACTATCTGCAGATAC
 CTGTGAACGTGCTCCACTCCGTGCTCGCTGGCCAACTACCAGCGGATGGCCCCATGTGCATGACAA
 CCAGGGTGGTGCTCCCACTACTACCCCAACAGCTTCAGCGCACCAAGAGCAGCAGGGCTCGGCCCTGGAG
 CACCATAGCCAGTCTCTGCAGATGTGAAGCGCTTCAACAGTGTAAAGACAACGCTCACTCAGGTGC
 GGACATTCTATACGAAGGTGTTGAATGAGGAGGAGAGAAACGCCTGTGTGAGAATTGCCAACCCCT
 GAAAGATGCTCAGCTTTTCACTCAGAGGAAAGCGGTCAAGAATTTCACTGACGTCCACCCTGACTACGGG
 GCCCGAGTCCAGGCTCTTCTGGACCAGTACAACCTCCAGAAGCCTAAGAATGCAATTACACCTACGTAC
 AGGCCGGCTCTCACATAGCTGCCAAGGAAAAGCTAACCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR211879 representing NM_012520
 Red=Cloning site Green=Tags(s)

MADSRDPASDQMKQWKEQRAPQKPDVLTGGGNPIGDKLNIMTAGPRGPLLVQDVVFTDEMAHFRERIP
 ERVVHAKGAGAFGYFEVTHDITRYSKAKVFEHIGKRTPIAVRFSTVAGESGSADTVRDRPGFAVKFYTED
 GNWDLVGNNTPIFFIRDAMLFPFSFIHSQKRNQPQTHLKDPMVWDFWLSLCPESLHQVTFVLSDRGIPDHR
 HMNGYGSHTFKLVNANGEAVYCKFHYKTDQGIKNLPVEEAGRLAQEDPDYGLRDLFNIAISGNYPSTWTFY
 IQVMTFKEAETFPFNPFDLTKVWPHKDYPLIPVGKLVLRNPNANYFAEVEQMAFDPSPMPPGIEPSPDKM
 LQGRLFAYPDTHRRLGPNYLQIPVNCYPYRVRANYQRDGPMMHDNQGAPNYYPNSFSAPEQQGSALE
 HHSQCSADVKRFNSANEDNVTQVRTFYTKVLNEEERKRLCENIANHLKDAQLFIQRKAVKNFTDVHDPDYG
 ARVQALLDQYNSQKPKNAIHTYVQAGSHIAAKGKANL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_012520

ORF Size: 1581 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_012520.2](#), [NP_036652.1](#)

RefSeq Size: 2564 bp

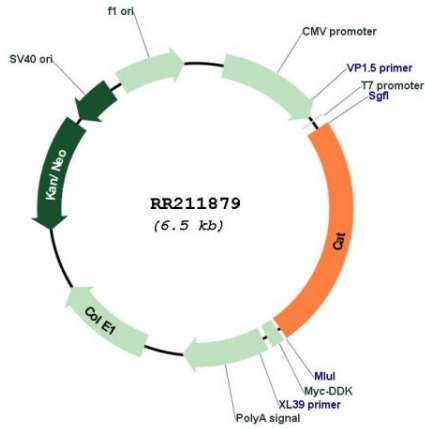
RefSeq ORF: 1584 bp

Locus ID: 24248

UniProt ID: [P04762](#)

Cytogenetics: 3q32
 MW: 59.8 kDa
 Gene Summary: functions as a hydrogen peroxide:hydrogen peroxide reductase [RGD, Feb 2006]

Product images:



Circular map for RR211879