

## Product datasheet for **RR211517**

### Oat (NM\_022521) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Oat (NM\_022521) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Oat  
**Synonyms:** rOAT  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR211517 representing NM\_022521  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTTCCAACTAGCAAGTCTGCAGACTGTTGCCGCTCTGCGTCGAGGACTCCGCACCTCAGTCGCT  
CTGCCACATCTGTTGCAACGAAGAAGACAGAGCAAGGCCACCATCCTCTGAGTACATTTTGAACGGGA  
ATCTAAATATGGTGCACACAATTACCATCCTTTACCTGTAGCCCTGGAGAGAGGAAAAGGCATTTATATG  
TGGGATGTGGAAGGCAGGCAGTACTTCGACTTCCTGAGTGCTTATGGTGTGTCAGCCAAGGACACTGCC  
ACCCAAAGATCATAGAAGCCATGAAGAGTCAGGTGGACAAGCTGACATTAACATCTCGGGCTTTCTATAA  
CAATGTCCTTGGTGAATATGAGGAGTACATCACCAAGCTTTTCAACTACAACAAAGTTCTTCCTATGAAT  
ACAGGAGTGGAGGCCGGAGAGACTGCGTGAAGCTTGCTCGCCGTTGGGGCTACACCGTGAAGGCATCC  
AGAAATACAAAGCAAAGATCGTTTTTGTGTTGGAAACTTTTGGGGTCCGACGCTGTCTGCAGTCTCCAG  
TTCCACAGATCCGACCAGTTATGATGGCTTTGGACCCTCATGCCAGGCTTTGAAACCATCCCATATAAC  
GATCTGCCTGCGCTAGAGCGTGCTTTCAGGATCCCAATGTTGCTGCTTTCATGGTGGAGCCCATCCAGG  
GTGAAGCGGGTGTATCGTTCAGATCCAGGATACCTGACGGGAGTTCGAGAACTTGCACCCGGCACCA  
GGTCCTGTTTATTGCTGATGAAATACAGACAGGATTGGCTAGAAGTGGTGGATGGCTAGCTGTGGATCAT  
GAGAATGTCAGACCTGACATAGTCTTCTTGGGAAGGCCCTTTCTGGTGGCTTATATCCCGTGTCTGCAG  
TGCTGTGTGATGACATAATGCTGACCATTAACCAGGCGAGCACGGCTCCACGTATGGCGGCAACCC  
ACTAGGCTGCCGAATTGCTATTGCGGCTCTTGAGGTTTTAGAAGAAGAGCATCTTGTGAAAACGCAGAC  
AAGATGGGTGCCATCTTGAGAAAGGAGCTCATGAAGCTGCCATCTGATGTTGTGACTGCTGTGAGAGGGA  
AAGGGTTGCTAAATGCCATCGTCATCCGAGAAACCAAGATTGTGACGCTTGAAGGTGTGCTCGGACT  
CCGAGATAATGGGCTTCTGGCCAAGCCAACCCATGGTATATCATCCGGCTTGGCCCTCCACTTGTGATC  
AAAGAGGATGAGATCCGGGAGTCAGTGGAGATCATCAACAAGACCATCTGTCTCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RR211517 representing NM\_022521  
 Red=Cloning site Green=Tags(s)

MLSKLASLQTVAALRRGLRTSVASATSVATKKTEQGPPSSEYIFERESKYGAHNYHPLPVALERKGIYM  
 WDVEGRQYDFDL SAYGAVSQGHCHPKIIEAMKSQVDKLTLSRAFYNVVLGEYEEYITKLFNYNKVLPMN  
 TGVEAGETACKLARRWGYTVKGIQKYKAKIVFAVGNFWGRTL SAVSSSTDPTSYDGF GPFMPGFETIPYN  
 DLPALERALQDPNVA AFMVEPIQGEAGVIVPDPGYLTGVRELCTR HQVLFIADEIQTGLARTGRWLAVDH  
 ENVRPDI VLLGKALSGGLYPVSAVLCDDDIMLTIKPEHGSTYGGNPLGCRIAIAALEVLEEHLAENAD  
 KMGAILRKELMKLP SDVVTAVRGKLLNAIVIRETKDCDAWKVCLRLRDNGLLAKPTHGDIIRLAPPLVI  
 KEDEIRESVEIINKTILSF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

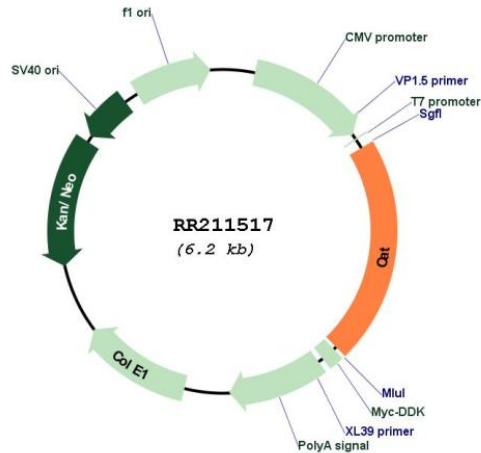
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM\_022521

<b>ORF Size:</b>	1317 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_022521.3</a> , <a href="#">NP_071966.1</a>
<b>RefSeq Size:</b>	2178 bp
<b>RefSeq ORF:</b>	1320 bp
<b>Locus ID:</b>	64313
<b>UniProt ID:</b>	<a href="#">P04182</a>
<b>Cytogenetics:</b>	1q41
<b>MW:</b>	48.3 kDa
<b>Gene Summary:</b>	catalyzes the transamination of ornithine and alpha-ketoglutarate to form glutamic gamma-semialdehyde and glutamate [RGD, Feb 2006]