

## Product datasheet for **MR221655**

### **Dyrk1a (NM\_007890) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dyrk1a (NM_007890) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dyrk1a
Synonyms:	2310043O08Rik; D16Ertd272e; D16Ertd493e; Dyrk; ENSMUSG00000074897; Gm10783; mmb; Mnbh; Mp86
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MR221655 representing NM\_007890  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCATACAGGAGAGAGACTTCAGCATGCAAACCTTCATCTGTCCGGCTTGACCCGTCGTCTCATTCC  
 ATGCTGCTGGCCTTCAGATGGCTGCACAGATGCCCACTCACACCAGTACAGTGACCGTCGCCAGCCGAG  
 CATAAGTGACCAGCAGGTGTCTGCCTTACCATATTCTGACCAGATTTCAGCAACCTCTAACTAACCAGGTG  
 ATGCCTGACATTGTCATGTTACAGAGGCGGATGCCCAAACCTTCGGTATCCAGCAACTGCTCCTCTGA  
 GAAAACCTCTGTGGACTTGATCAAACATACAAGCATATTAATGAGGTTTACTATGCAAAAAAGAAGCG  
 AAGACACCAACAGGGCCAGGGGACGATTCCAGTCATAAGAAGGAGCGGAAGGTTTACAATGATGGTTAC  
 GATGATGATAACTATGATTATATTGTA AAAAACGGGAAAAGTGGATGGATCGGTATGAAATCGACTCCT  
 TAATAGGCAAAGGTTCAATTTGGACAGGTTGTGAAAGCTTATGACAGAGTGGAGCAAGAATGGGTCGCCAT  
 TAAAATCATCAAGAACAAGAAAGCGTTTCTGAATCAAGCCAGATAGAAGTGGCGCTGCTTGAGCTCATG  
 AACAAACACGACTGAAATGAAGTACTACATAGTGCATTTGAAACGCCACTTTATGTTTCGAAACCATC  
 TCTGTTTGTGTTTGAATGCTGTCCTATAATCTCTATGATTTGTTGAGAAACACCAACTCCGAGGGGT  
 CTCTTTGAACCTAACACGAAAGTTTGCACAACAGATGTGCACAGCATTGCTTTTTCTTGCGACTCCAGAA  
 CTTAGTATCATTCACTGTGACTTAAAGCCTGAGAACATCCTTCTGTGTAACCCCAAACGGAGTGCAATCA  
 AGATTGTTGATTTTGGCAGCTCTGTGAGTTGGGGCAGAGGATATACCAGTATATTCAGAGTCGCTTTTA  
 TCGGTCTCCAGAGGTGCTACTGGGAATGCCTTATGACCTTGCTATCGACATGTGGTCCCTTGGATGATC  
 TTGGTTGAAATGCACACTGGAGAGCCTCTGTTTCAGTGGTCCAAATGAGGTCGATCAGATGAATAAAATAG  
 TGGAACTCTGGGCATCCACCTGCTCATATTCTTGACCAAGCACCGAAAGCAAGAAAGTTCTTTGAGAG  
 GTTGCCCGATGGCACTTGGAGCTTAAAGAAGACCAAAGATGGA AAAACGGGAGTACAAACACCAGGAACC  
 CGTAAACTTCATAATATTCTTGGAGTAGAAACAGGAGGACCTGGCGGGCGCGTGTGGGAATCGGGTC  
 AACTGTAGTACTACTTGAAGTTCAAAGACCTCATTTTAAGGATGCTTGATTATGACCCAAAACCTCG  
 GATTCAACCTTATTATGCCCTGCAGCACAGTTTTTTCAAGAAAACAGCTGATGAAGGTACCAACACAAGT  
 AACAGTGTGTCTACCAGCCCTGCGATGGAGCAGTCTCAGTCTTCAGGCACCACCTCCAGCACCTCCTCCA  
 GCTCAGGTGGATCCTCGGAACGAGTAACAGTGGGAGAGCCAGGTCGGATCCGACGCACCAGCATCGACA  
 CAGCGGTGGACACTTCGCTGCTGCTGTCCAGGCCATGGACTGTGAGACACACAGTCCCAGGTGCGCCAG  
 CAGTTTCCGGCTCCTCTGGGATGGTCAGGCACTGAAGCTCTACACAAGTCACTGTTGAAACTCATCCTG  
 TTCAAGAGACAACCTTTTCATGTAGCCCCCAGCAGAACGATTGCATCATCACCATGGA AACAGTCCCA  
 TCACCACCACCACCACCATCACCACCACCACCACCATGGACAGCAAGCCTTGGGTAAACGGACCAGGCCA  
 AGGGTCTACAATTCTCCAACAAATAGCTCCTTACCCAGGATTCTATGGAGGTTGGCCACAGTCAACCACT  
 CCATGACATCCCTGTCTTCTCAACAACCTTCTTCTCGACATCTTCTCCTCTACTGGTAATCAAGGCAA  
 TCAGGCCATCAGAACC GCCAGTGGCTGCTAACACCTTGGACTTTGGACAGAATGGAGCTATGGACGTT  
 AATTTGACCGTCTACTCCAATCCCCGCCAAGAGACTGGCATAGCTGGACATCCAACATACCAATTTCTG  
 CTAATACAGGTCCTGCACATTACATGACTGAAGGACATCTGGCGATGAGACAAGGGGCTGATAGAGAAGA  
 GTCTCCATGACAGGAGTTTGTGTGCAACAGAGTCTGTAGCTAGCTCG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR221655 representing NM\_007890  
 Red=Cloning site Green=Tags(s)

```
MHTGGETSACKPSSVRLAPSFHAAGLQMAAQMPHSHQYSDRRQPSISDQQVSALPYSDQIQQPLTNQV
MPDIVMLQRRMPQTFRDPATAPLRKLSVDLIKTYKHINEVYYAKKKRRHQGGDDSSHKKERKVYNDGY
DDDNYDYIVKNGEKWMDRYEIDSLIGKGSFGQVVKAYDRVEQEWAIIKIKNKKAFLNQAQIEVRLELM
NKHDEMKYYIVHLKRHFMRNHLCLVFEMLSYNLYDLLRNTNFRGVSLNLTRKFAQQMCTALLFLATPE
LSIIHCDLKPENILLCNPKRSAIKIVDFGSSCQLGQRIYQYIQSRFYRSPEVLLGMPYDLAIDMWSLGCIL
LVEMHTGEPLFSGANEVDQMNKIVEVLGIPPAHILDQAPKARKFFEKLPDGTWSLKTKDKGREYKPPGT
RKLHNLGVETGGPGRRAGESGHTVADYLFKFDLILRMLDYDPKTRIQPYALQHSFFKKTADEGTNTS
NSVSTSPAMEQSQSSGTTSSSSSSGGSSGTSNSGRARSDPTHQHRHSGGHFAAAVQAMDCETHSPQVRQ
QFPAPLWGSGETEAPTQVTVEHPVQETTFHVAPQQNALHHHHGNSHHHHHHHHHHHHHHHGGQALGNRTRP
RVYNSPTNSSSTQDSMEVGHSHSMTSLSSSTSSSTSSSTGNQGNQAYQNRPVAANTLDFGQNGAMDV
NLTVYSNPRQETGIAGHPTYQFSANTGPAHYMTEGHLAMRQADREESPMTGVCVQQSPVASS
```

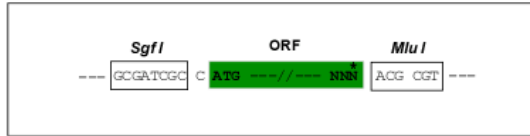
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2138\\_g07.zip](https://cdn.origene.com/chromatograms/ja2138_g07.zip)

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:

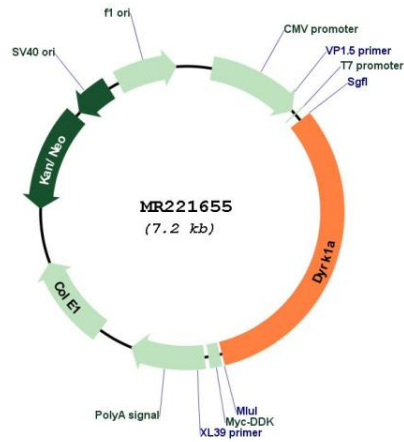


\* The last codon before the Stop codon of the ORF

ACCN: NM\_007890  
 ORF Size: 2289 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<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>	<p><a href="#">NM_007890.2</a>, <a href="#">NP_031916.1</a></p>
<b>RefSeq Size:</b>	<p>6035 bp</p>
<b>RefSeq ORF:</b>	<p>2292 bp</p>
<b>Locus ID:</b>	<p>13548</p>
<b>UniProt ID:</b>	<p><a href="#">Q61214</a></p>
<b>Cytogenetics:</b>	<p>16 55.3 cM</p>
<b>MW:</b>	<p>85.9 kDa</p>
<b>Gene Summary:</b>	<p>Dual-specificity kinase which possesses both serine/threonine and tyrosine kinase activities. May play a role in a signaling pathway regulating nuclear functions of cell proliferation. Modulates alternative splicing by phosphorylating the splice factor SRSF6 (By similarity). Exhibits a substrate preference for proline at position P+1 and arginine at position P-3. Has pro-survival function and negatively regulates the apoptotic process. Promotes cell survival upon genotoxic stress through phosphorylation of SIRT1. This in turn inhibits TP53 activity and apoptosis (PubMed:20167603).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR221655