

Product datasheet for **MG221655**

Dyrk1a (NM_007890) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dyrk1a (NM_007890) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dyrk1a
Synonyms:	2310043O08Rik; D16Ertd272e; D16Ertd493e; Dyrk; ENSMUSG00000074897; Gm10783; mmb; Mnbh; Mp86
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG221655 representing NM_007890
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCATACAGGAGAGAGACTTCAGCATGCAAACCTTCATCTGTCCGGCTTGACACCGTCGTTCTCATTCC
 ATGCTGCTGGCCTTCAGATGGCTGCACAGATGCCCACTCACACCAGTACAGTGACCGTCGCCAGCCGAG
 CATAAGTGACCAGCAGGTGTCTGCCTTACCATATTCTGACCAGATTTCAGCAACCTCTAATAACAGGTG
 ATGCCTGACATTGTCATGTTACAGAGGCGGATGCCCAAACCTTCGGTATCCAGCAACTGCTCCTCTGA
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 CTAATACAGGTCTGCACATTACATGACTGAAGGACATCTGGCGATGAGACAAGGGGCTGATAGAGAAGA
 GTCTCCATGACAGGAGTTTGTGTGCAACAGAGTCTGTAGCTAGCTCG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG221655 representing NM_007890
 Red=Cloning site Green=Tags(s)

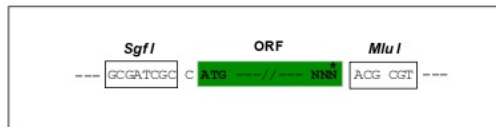
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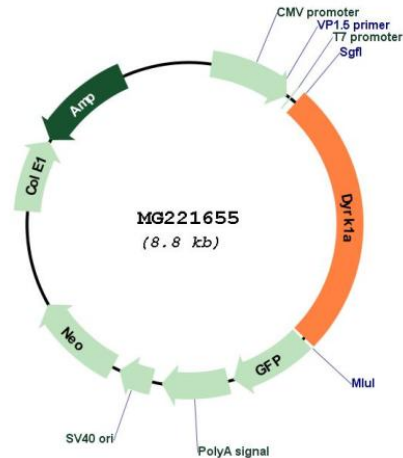
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_007890

ORF Size: 2289 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_007890.2](#), [NP_031916.1](#)

RefSeq Size: 6035 bp

RefSeq ORF: 2292 bp

Locus ID: 13548

UniProt ID: [Q61214](#)

Cytogenetics: 16 55.3 cM

Gene Summary: 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]