

Product datasheet for **SC309491**

DYRK1A (NM_101395) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | DYRK1A (NM_101395) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | DYRK1A |
| Synonyms: | DYRK; DYRK1; HP86; MNB; MNBH; MRD7 |
| Vector: | <u>pCMV6 series</u> |



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Fully Sequenced ORF: >NCBI ORF sequence for NM_101395, the custom clone sequence may differ by one or more nucleotides

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ATGCATACAGGAGGAGAGACTTCAGCATGCAAACCTTCATCTGTTTCGGCTTGACCCGTCA
TTTTATTCCATGCTGCTGGCCTTCAGATGGCTGGACAGATGCCCCATTACATCAGTAC
AGTGACCGTCGCCAGCCAAACATAAGTGACCAACAGGTTTCTGCCTTATCATATTCTGAC
CAGATTCAGCAACCTCTAACTAACCCAGGTGATGCCTGATATTGTCATGTTACAGAGGCGG
ATGCCCCAAACCTTCCGTGACCCAGCAACTGCTCCCCTGAGAAAACCTTTCTGTTGACTTG
ATCAAAACATACAAGCATATTAATGAGGTTTACTATGCAAAAAAAGGCGAAGACACCAA
CAGGGCCAGGGAGACGATTCTAGTCATAAGAAGGAACGGAAGGTTTACAATGATGGTTAT
GATGATGATAACTATGATTATATTGTA AAAACGGAGAAAAGTGGATGGATCGTTACGAA
ATTGACTCCTTGATAGGCAAAGGTTCCCTTTGGACAGGTTGTAAGGCATATGATCGTGTG
GAGCAAGAATGGGTTGCCATTAATAATAAAGAACAAGAAGGCTTTTCTGAATCAAGCA
CAGATAGAAGTGCGACTTCTTGAGCTCATGAACAAACATGACACTGAAATGAAATACTAC
ATAGTGCATTTGAAACGCCACTTTATGTTTCGAAACCATCTCTGTTTAGTTTTTGAATG
CTGTCCTACAACCTCTATGACTTGTGAGAAACCAATTTCCGAGGGGTCTCTTTGAAC
CTAACACGAAAGTTTGCGCAACAGATGTGCACTGCACTGCTTTTCTTGGGACTCCAGAA
CTTAGTATCATTCACTGTGATCTAAAACCTGAAAATATCCTTCTTTGTAACCCCAAACGC
AGTGCAATCAAGATAGTTGACTTTGGCAGTTCTTGTGCTGGGGCAGAGGATATACCAG
TATATTAGAGTCGCTTTTATCGGTCTCCAGAGGTGCTACTGGGAATGCCTTATGACCTT
GCCATTGATATGTGGTCCCTCGGGTGTATTTGGTTGAAATGCACACTGGAGAACCTCTG
TTCAGTGGTGCCAATGAGGTAGATCAGATGAATAAAATAGTGGAAAGTTCTGGGTATTCCA
CCTGCTCATATTCTTGACCAAGCACAAAAGCAAGAAAGTTCTTTGAGAAGTTGCCAGAT
GGCATTGGAACTTAAAGAAGACCAAAGATGAAAACGGGAGTACAAACCACAGGAACC
CGTAAACTTCATAACATTCTTGGAGTGGAAACAGGAGGACCTGGTGGGCGACGTGCTGGG
GAGTCAGGTCATACGGTTCGCTGACTACTTGAAGTTCAAAGACCTCATTTTAAGGATGCTT
GATTATGACCCCAAACTCGAATTCAACCTTATTATGCTCTGCAGCACAGTTTCTTCAAG
AAAACAGCTGATGAAGGTACAAATACAAGTAATAGTGTATCTACAAGCCCCGCCATGGAG
CAGTCTCAGTCTTCGGGCACCACCTCCAGTACATCGTCAAGCTCAGGTGGCTCATCGGGG
ACAAGCAACAGTGGGAGAGCCCGTCCGGATCCGACGCACCAGCATCGGCACAGTGGTGGG
CACTTCACAGTCCCGTGCAGGCCATGGACTGCGAGACACAGTCCCCAGGTGAGCTCG
CACGTGGTTCATTTGCTGTGTACCTGCCATTCTCAGGTGGAGCAGCACTGGATGCCAG
GTGCCCTTAGAATGA
    
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Restriction Sites: Please inquire

ACCN: NM_101395

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](#)

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| OTI Annotation: | This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA. |
| 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: | <ol style="list-style-type: none">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_101395.1 , NP_567824.1 |
| RefSeq Size: | 5315 bp |
| RefSeq ORF: | 1755 bp |
| Locus ID: | 1859 |
| UniProt ID: | Q13627 |
| Cytogenetics: | 21q22.13 |
| Protein Families: | Druggable Genome, Protein Kinase |
| Gene Summary: | <p>This gene encodes a member of the Dual-specificity tyrosine phosphorylation-regulated kinase (DYRK) family. This member contains a nuclear targeting signal sequence, a protein kinase domain, a leucine zipper motif, and a highly conservative 13-consecutive-histidine repeat. It catalyzes its autophosphorylation on serine/threonine and tyrosine residues. It may play a significant role in a signaling pathway regulating cell proliferation and may be involved in brain development. This gene is a homolog of Drosophila <i>mnb</i> (minibrain) gene and rat <i>Dyrk</i> gene. It is localized in the Down syndrome critical region of chromosome 21, and is considered to be a strong candidate gene for learning defects associated with Down syndrome. Alternative splicing of this gene generates several transcript variants differing from each other either in the 5' UTR or in the 3' coding region. These variants encode at least five different isoforms. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (3) is alternatively spliced in the 5' UTR and in the 3' coding region, as compared to variant 1. It encodes a 179 aa shorter isoform which lacks the poly-His domain and has a different C-terminus, compared to isoform 1.</p> |