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Product datasheet for RC202864

DYRK2 (NM_006482) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DYRK2 (NM_006482) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DYRK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC202864 representing NM_006482
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTAACCAGGAAACCTTCGGCCGCCGCTCCCGCCGCCTACCCGACCGGCCGAGGTGGGGACAGCGCCG
TTCGTCAGCTTCAGGCTTCCCCGGGGCTCGGTGCAGGGGCCACCCGGAGCGGAGTGGGGACTGGCCCGCC
CTCCCCCATCGCCCTGCCGCCTCTCCGGGCCAGCAACGCTGCCGCCGCAGCCCACACGATTGGCGGCAGT
AAGCACACAATGAATGATCACCTGCATGTCGGCAGCCACGCTCACGGACAGATCCAGGTTCAACAGTTGT
TTGAGGATAACAGTAACAAGCGGACAGTGCTCACGACACAACCAAATGGGCTTACAACAGTGGGCAAAAC
GGGCTTGCCAGTGGTGCCAGAGCGGCAGCTGGACAGCATTCATAGACGGCAGGGGAGCTCCACCTCTCTA
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TGCAAAAACTCACAGCCTTCGAACACCATGAGATTTTCAGCTACCCTGAAATATATTTCTTGGGTCTAAA
TGCTAAGAAGCGCCAGGGCATGACAGGTGGGCCCAACAATGGTGGCTATGATGATGACCAGGGATCATAT
GTGCAGGTGCCCCACGATCACGTGGCTTACAGGTATGAGGTCCTCAAGGTCATTGGGAAGGGGAGCTTTG
GGCAGGTGGTCAAGGCCTACGATCACAAAGTCCACCAGCACGTGGCCCTAAAGATGGTGCGGAATGAGAA
GCGCTTCCACCGGCAAGCAGCGGAGGAGATCCGAATCCTGGAACACCTGCGGAAGCAGGACAAGGATAAC
ACAATGAATGTCATCCATATGCTGGAGAATTTCACCTTCCGCAACCACATCTGCATGACGTTTGAGCTGC
TGAGCATGAACCTCTATGAGCTCATCAAGAAGAATAAATTCCAGGGCTTCAGTCTGCCTTTGGTTCGCAA
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CCCGAGAACATTTTGTTAAAGCAGCAGGGTAGAAGCGGTATTAAAGTAATTGATTTTGGCTCCAGTTGTT
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CAGGTATGGCATGCCCATTGATATGTGGAGCCTGGGCTGCATTTTAGCAGAGCTCCTGACGGGTTACCCC
CTCTTGCCTGGGGAAGATGAAGGGGACCAGCTGGCCTGTATGATTGAACTGTTGGGCATGCCCTCACAGA
AACTGCTGGATGCATCCAAACGAGCCAAAAATTTTGTGAGCTCCAAGGGTTATCCCCGTTACTGCACTGT
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CCGGAGAGCAGAGAGTGGGGGAACGCGCTGAAGGGGTGTGATGATCCCCTTTTCCTTGACTTCTTAAAAC
AGTGTTTAGAGTGGGATCCTGCAGTGCGCATGACCCCAGGCCAGGCTTTGCGGCACCCCTGGCTGAGGAG
GCGGTTGCCAAAGCCTCCCACCGGGGAGAAAACGTCAGTGAAAAGGATAACTGAGAGCACCGGTGCTATC
ACATCTATATCCAAGTTACCTCCACCTTCTAGCTCAGCTTCCAAACTGAGGACTAATTTGGCGCAGATGA
CAGATGCCAATGGGAATATTCAGCAGAGGACAGTGTTGCCAAAACTTGTTAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202864 representing NM_006482
Red=Cloning site Green=Tags(s)

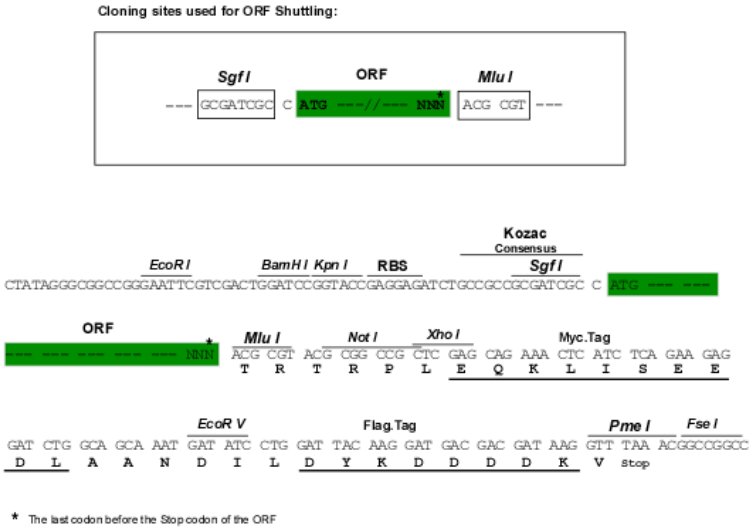
MLTRKPSAAAPAAYPTGRGGDSAVRQLQASPGLGAGATRSGVGTGPPSPIALPPLRASNAAAAAHTIGGS
KHTMNDHLHVGSHAHGQIQVQQLFEDNSNKRTVLTTQPNGLTTVGKTGLPVVPERQLDSIHRRQGSSTSL
KSMEGMGKVKATPMTPEQAMKQYMQKLTAFEHHEIFSYPEIYFLGLNAKKRQGMTGGPNNGGYDDDQGSY
VQVPHDHVAYRYEVLKVIGKGSFGQVVKAYDHKVHQHVALKMVRNEKRFHRQAAEEIRILEHLRKQDKDN
TMNVIHMLENFTFRNHICMTFELLSMNLYELIKKNKFQGFSLPLVRKFAHSILQCLDALHKNRIIHCDLK
PENILLKQQGRSGIKVIDFGSSCYEHQRVYTYIQSRFYRAPEVILGARYGMPIDMWSLGCILAELLTGYP
LLPGEDEGDQLACMIELLGMPSQKLLDASKRAKNFVSSKGYPRYCTVTTLSDGSVVLNGGRSRRGKLRGP
PESREWGNALKGCDDPLFLDFLKQCLEWDPAVRMTPGQALRHPWLRRRLPKPPTGEKTSVKRITESTGAI
TSISKLPPPSSSASKLRTNLAQMTDANGNIQQRTVLPKLVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2536_a04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006482

ORF Size: 1803 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_006482.3

RefSeq Size: 6159 bp

RefSeq ORF: 1806 bp

Locus ID: 8445

UniProt ID: Q92630

Cytogenetics: 12q15

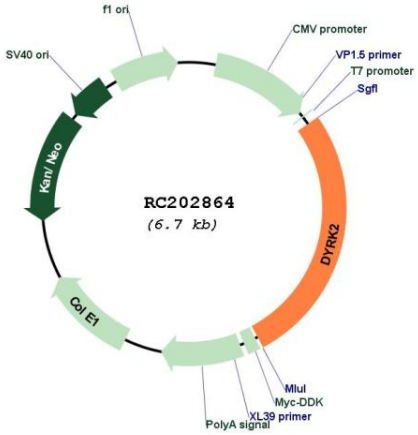
Domains: pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

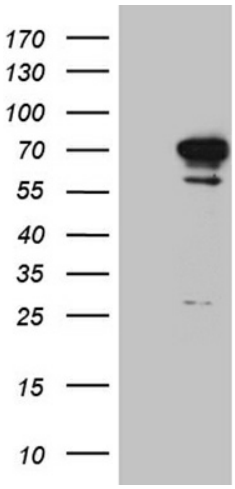
MW: 67.1 kDa

Gene Summary: DYRK2 belongs to a family of protein kinases whose members are presumed to be involved in cellular growth and/or development. The family is defined by structural similarity of their kinase domains and their capability to autophosphorylate on tyrosine residues. DYRK2 has demonstrated tyrosine autophosphorylation and catalyzed phosphorylation of histones H3 and H2B in vitro. Two isoforms of DYRK2 have been isolated. The predominant isoform, isoform 1, lacks a 5' terminal insert. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC202864



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DYRK2 (Cat# RC202864, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DYRK2 (Cat# [TA810286])(1:2000).