

Product datasheet for **SC323580**

DYRK2 (NM_006482) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DYRK2 (NM_006482) Human Untagged Clone
Tag:	Tag Free
Symbol:	DYRK2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC323580 sequence for NM_006482 edited (data generated by NextGen Sequencing)

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ATGTTAACCGAGAAACCTTCGGCCGCCGCTCCCGCCGCTACCCGACCGGCCGAGGTGGG
GACAGCGCGGTTTCGTTCAGCTTTCAGGCTTCCCGGGGCTCGGTGCAGGGGCCACCCGGAGC
GGAGTGGGGACTGGCCCGCCCTCCCCATCGCCCTGCCGCTCTCCGGCCAGCAACGCT
GCCGCCGAGCCACACGATTGGCGGAGTAAGCACACAATGAATGATCACCTGCATGTC
GGCAGCCACGCTCACGGACAGATCCAGGTTCAACAGTTGTTTGGAGATAACAGTAACAAG
CGGACAGTGTCTACGACACAACCAATGGGCTTACAACAGTGGGCAAAACGGGCTTGCCA
GTGGTGCCAGAGCGGACGCTGGACAGCATTATAGACGGCAGGGGAGCTCCACCTCTCTA
AAGTCCATGGAAGGCATGGGGAAGGTGAAAGCCACCCCATGACACCTGAACAAGCAATG
AAGCAATACATGCAAAAACCTCACAGCCTTCAACACCATGAGATTTTCAGCTACCCTGAA
ATATATTTCTTGGGTCTAAATGCTAAGAAGCGCCAGGGCATGACAGGTGGGCCCAACAAT
GGTGGCTATGATGATGACCAGGGATCATATGTGCAGGTGCCCCACGATCACGTGGCTTAC
AGGTATGAGGTCCTCAAGGTCATTGGGAAGGGGAGCTTTGGGCAGGTGGTCAAGGCCTAC
GATCACAAGTCCACCAGCACGTGGCCCTAATGATGGTGCGGAATGAGAAGCGCTTCCAC
CGCAAGCAGCGAGGAGATCCGAATCCTGGAACACCTGCGGAAGCAGGACAAGGATAAC
ACAATGAATGTCATCCATATGCTGGAGAATTTACCTTCCGCAACCACATCTGCATGACG
TTTGAGCTGCTGAGCATGAACCTCTATGAGCTCATCAAGAAGAATAAATTCAGGGCTTC
AGTCTGCCTTTGGTTTCGCAAGTTTGCCCACTCGATTCTGCAGTGCCTTGGATGCTTTGCAC
AAAAACAGAATAATTCAGTGTGACCTTAAGCCCGAGAACATTTTGTAAAGCAGCAGGGT
AGAAGCGGTATTAAGTAATTTGATTTTGGCTCCAGTTGTTACGAGCATCAGCGTGTCTAC
ACGTACATCCAGTCCGCTTTTACCAGGGCTCCAGAAGTATCCTTGGGGCCAGGTATGGC
ATGCCCATTTGATATGTGGAGCCTGGGCTGCATTTTAGCAGAGCTCCTGACGGGTTACCC
CTCTTGCCTGGGGAAGATGAAGGGGACCACTGGCCTGTATGATTGAACCTGTTGGGCATG
CCCTCACAGAAACTGCTGGATGCATCCAACGAGCCAAAAATTTGTGAGCTCCAAGGT
TATCCCGTTACTGCACTGTGACACTCTCTCAGATGGCTCTGTGGTCTAAACGGAGGC
CGTTCCCGGAGGGGAAACTGAGGGGCCACCGGAGAGCAGAGAGTGGGGAAACGCGCTG
AAGGGGTGTGATGATCCCTTTTCTTGACTTCTTAAACAGTGTTTAGAGTGGGATCCT
GCAGTGCAGATGACCCAGGCCAGGCTTTCGCGCACCCCTGGCTGAGGAGCGGTTGCCA
AAGCCTCCACCGGGGAGAAAACGTCAGTAAAAGGATAACTGAGAGCACCGGTGCTATC
ACATCTATATCCAAGTTACCTCCACCTTCTAGCTCAGCTTCCAAACTGAGGACTAATTTG
GGCAGATGACAGATGCCAATGGGAATATTCAGCAGAGGACAGTGTGCCAAAACCTGTT
AGCTGA
    
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Clone variation with respect to NM_006482.2
752 a=>t

5' Read Nucleotide Sequence: >OriGene 5' read for mutant NM_006482 unedited

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CCGCCCCGTACAGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTTCTATATAAGCAGAGCTCGTTTAGTG
AACCGTCAGAATATTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGGAGAGCGGGG
GCTCGCGCGCGGGGCCCGGCCGAGGGGATGCAGTGGACTGTGTGTGTCTGGCTGTAGCAGACGCGAGG
CGGCGACGAGGCGCCGGGACCCGCGCAGGGGCGGCCGGGAGGCGGCGCGCGGCCCGCCAGAGTAGCA
GCAGACCGGCGGCGGCGACGGCAGCCCTGAATGCATTTTCTCTCCACGCCCCGTGGGGGGGGGGCGG
AGGCCGCGCTACGCCGCTAACCGACCGCGGTGTGACACCGCTTGGGGGGTGCGGTTCCCGGGACTC
GTGATGAACCACAAAAATAAATG
    
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Kinase Domain Sequence: >SC323580 kinase domain raw sequence. By performing [BLASTX](#) analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation

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TAGTATMMGTGGCTTAAGGTATGAGGTCCTCAGGTCATTGGGAAGGGGAGCTTTGGGCAGGTGGTCAAGG
CCTACGATCACAAGTCCACCAGCACGTGGCCCTAATGATGGTGCGGAATGAGAAGCGCTTCCACCGGCA
AGCAGCGGAGGAGATCCGAATCCTGGAACACCTGCGGAAGCAGGACAAGGATAACACAATGAATGTCATC
CATATGCTGGAGAATTTACCTTCCGCAACCACATCTGCATGACG
    
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Restriction Sites:	Please inquire
ACCN:	NM_006482
Insert Size:	2250 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.
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_006482.1 , NP_006473.1
RefSeq Size:	3615 bp
RefSeq ORF:	1806 bp
Locus ID:	8445
UniProt ID:	Q92630
Cytogenetics:	12q15
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
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] Transcript Variant: This variant (2) includes the 149 bp insert in the 5' end of the transcript and thus results in a longer amino-terminal protein.