

Product datasheet for MR222023

Spdya (NM_029254) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Spdya (NM_029254) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Spdya
Synonyms:	4921517J08Rik; 4930548B21Rik; GS4; MLZ-465; Spdy1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222023 representing NM_029254 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGGCATAATCAGATGTATTGTGAGACACCCTACTGTCACTATTCATGTAAAATCAGGCTCAAATA
GGTCACATCAAACCAGAAAACCTATTAGTCTGAAACGTCCTATTCTTAAAGATAGTTGGGAAGCATCTGA
AAACAATGCTCAGAATAACAAATCTAAGCGGCCAGAGGGCCTTGCTAATCATAACAGCGCCAGGAAATG
ACTGCTTTCTTTAAATTATTTGATGATGATTTAATTCAAGATTTCTGTGGATGGACTGCTGCTGAAGA
TTGAGACAAGTATCTTTGGCTATGACCTTTGTTTATTTCAAGAGAGCTAAATTTACTATAAATGAGCA
TACCAGGATAAATTTCTTTATTGCTCTGTATCTGGCTAATACGGTTGAAGAAGATGAAGAAGAAGCCAAG
TATGAAATTTTTCCATGGGCTTTAGGAAAACTGGAGAAAACTGTTCCCTAATTTCTTAAAGTTAAGGG
ACCAACTCTGGGACAGAATTGACTATAGGGCTATTGTAAGCAGGCGATGCTGTGAAGAGGTCATGGCCAT
TGCGCCAACCCATTACATCTGGCAACGAGAGCGGTCTGTGCATCACAGTGGAGCTGTTAGGAACTACAAC
AGAGATGAGGTTACCTGCCCAGGGACCTAGTGCCACACCAGTGGATTGCTCACTGTGTGGTAAAAAAG
GAAGATACGTGAGACTGGGACTGTCTTCATCCTCATCTTCTCCAGTGACACAGGAGAGCTAATGGAAAA
AGATTCTCAGGAACTACACAGTGCATTTCTAGTGGACACGGCAGGTGACCCTCCTCATACCTATTCTCAA
GTAGCCAATGACCATCAATCAAACAAAGAAAATGAAACTAATTTTGTGAAGAAAAACAAATCCGTGGAAT
GGTTTGACAGAGTGAAGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR222023 representing NM_029254
Red=Cloning site Green=Tags(s)

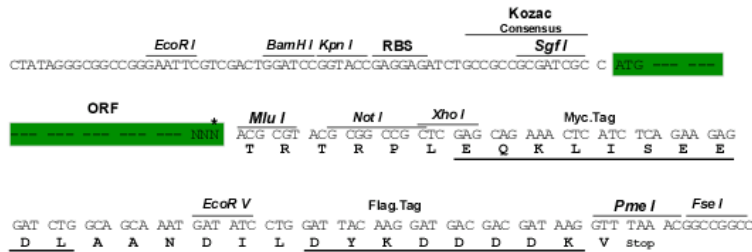
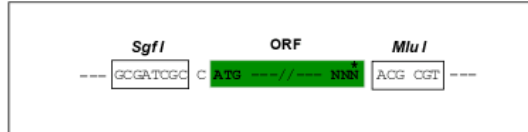
MRHNQMYCETPPTVTIHKVSGSNRSHQTRKPISLKRPILKDSWEASENNAQNNSKRPRGPCLIIQRQEM
 TAFFKLFDDDLIQDFLWMDCCCKIADKYLLAMTFVYFKRAKFTINEHTRINFFIALYLANTVEEDEEEAK
 YEIFPWALGKNWRKLFNFKLRDQLWDRIDYRAIVSRRCCEEVMAIAPTHYIWQRERSVHHS GAVRNYN
 RDEVHLPRGPSATPVDCSLCGKKGRYVRLGLSSSSSSSDTGELMEKDSQELHSAF SVDTAGDPPHTYSQ
 VANDHQSNKENETNFVKKNKSVEWFAESEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_029254

ORF Size: 930 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_029254.1](#), [NP_083530.1](#)

RefSeq Size: 1891 bp

RefSeq ORF: 933 bp

Locus ID: 70891

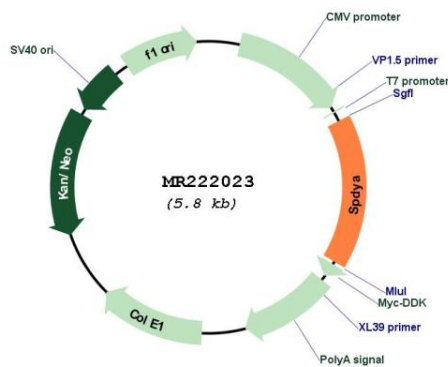
UniProt ID: [Q5IBH7](#)

Cytogenetics: 17 E1.3

MW: 36.6 kDa

Gene Summary: Regulates the G1/S phase transition of the cell cycle by binding and activating CDK1 and CDK2 (PubMed:15611625). Contributes to CDK2 activation without promoting CDK2 phosphorylation, by inducing a conformation change of the CDK2 T-loop that obstructs the substrate-binding cleft prior to kinase activation. Interferes with CDKN1B-mediated inhibition of CDK2. Mediates cell survival during the DNA damage process through activation of CDK2 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222023