

Product datasheet for **MR222014**

Dapk3 (NM_007828) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dapk3 (NM_007828) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dapk3
Synonyms:	dlk; ZIPK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR222014 representing NM_007828
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCACATTCAGGCAAGAGGATGTTGAGGACCATTATGAGATGGGAGAGGAGCTTGGCAGTGGCCAAT
 TTGCCATCGTGCCAAGTGCCAGCAGAAGGGCACGGGCATGGAGTATGCAGCCAAGTTCATCAAGAAGCG
 GCGCCTGCCATCCAGCCGGCGCGGTGTGAGCCTGGGAGGAGATCGAACCGGAGGTGAGCATCCTGCGCGAG
 ATCCGCCACCCCAACATCATAAACAATGCACTGACGTGTTGAGACAAGACAGATGTGGTGTGATCCTGG
 AGCTGGTGTCCGGTGGCGAGCTTTTCGACTTCTGGCCGAGAAGGAGTCAATTGACGGAGGATGAGGCCAC
 GCAGTTCTCAAACAAATCCTAGACGGTGTCCACTACCTGCACTCCAAGCGCATCGCACACTTTGACCTG
 AAGCCCGAGAACATCATGTTGCTGGACAAGCACGCAGCCAGCCCCGCATTAAGCTCATCGACTTTGGCA
 TCGCGCACAGGATCGAGGCTGGCAGCGAGTTCAAGAACATCTTTGGCACACCCGAGTTTGTGCCCCCGA
 GATCGTGAATATGAGCCACTTGGCTTGGAGGCTGACATGTGGAGCATTGGCGTCATCACCTACATCCTC
 CTGAGCGGAGCGTCCCCATTCTGGGCGAGACCAAGCAGGAGACGCTGACGAACATCTCAGCAGTGAAT
 ATGACTTTGATGAGGAATACTTCAGCAGCACCAGCGAGCTGGCCAAGGACTTCATCCGCAGGCTGCTGGT
 CAAAGACCCCAAGAGGAGGATGACCATCGCACAGAGCCTGGAGCATTCTGGATCAAGGTGCGCAGGCGC
 GAGGACGGCGCCCGAAGCCAGAGCGACGGCGGCTGCGCGCCGCGCGCCTGCGCGAGTACAGCCTCAAGT
 CCCACTCGAGCATGCCGCGCAACACGAGCTACGCCAGCTTCGAGCGCTTCTCACGCGTGTGGAGGACGT
 GGCGGGCGCAGAGAGGGGCTGCGCGAGCTGCAGCGAGGAGGCGCCAGTCCCGGGAGCGCGTGTGTGCG
 CTGCGCGCGCCCGCAGCAGCGGGAGGCGCGCTGCCCGCAGCGGAGCGCAGGGCTAGGGCGCGACTGC
 GACGCTGCGCACGGAGCTGGGGCGCACCGAGGCTTCCGACGCGCGCGCAGGAGGAGGCGGGCGCGC
 GCTGTTGGGTGCCGGGGCCTGAAGCGTGCCTGTGTGCGCTGGAGAACCGTTACGACGCGCTAGCCGCT
 CAGGTGGCCGCTGAGGTGCAATTCGTGCGCGACCTGGTGCCTGCGCTGGAGCAGGAACGGCTGCAGGCTG
 AGTGCGGCGTGGCG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>MR222014 representing NM_007828
 Red=Cloning site Green=Tags(s)

MSTFRQEDVEDHYEMGEELGSGQFAIVRKCQKGTGMEYAAKFIKKRRLPSSRRGVSREEIEREVSILRE
 IRHPNIIITLHDVFNKTDVVLILELVSGGELFDFLAEKESLDEDEATQFLKQILDGVHYLHASKRIAHFDL
 KPENIMLLDKHAASPRIKLIDFGIAHRIEAGSEFKNIFGTPEFVAPEIVNYEPLGLEADMWSIGVITYIL
 LSGASPFLGETKQETLTNISAVNYDFDEEYFSSSELAKDFIRRLVKDPKRRMTIAQSLEHSWIKVRRR
 EDGARKPERRRLRAARLREYSLKSHSSMPRNTSYASFERSRVLEDVAAAEQGLRELQRGRRQCRERVCA
 LRAAAEQREARCRDGSAGLGRDLRRLRTELGRTEALRTRAQEEARAALLGAGGLKRRLCRLENRYDALAA
 QVAAEVQFVRDLVRALEQERLQAECGVR

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

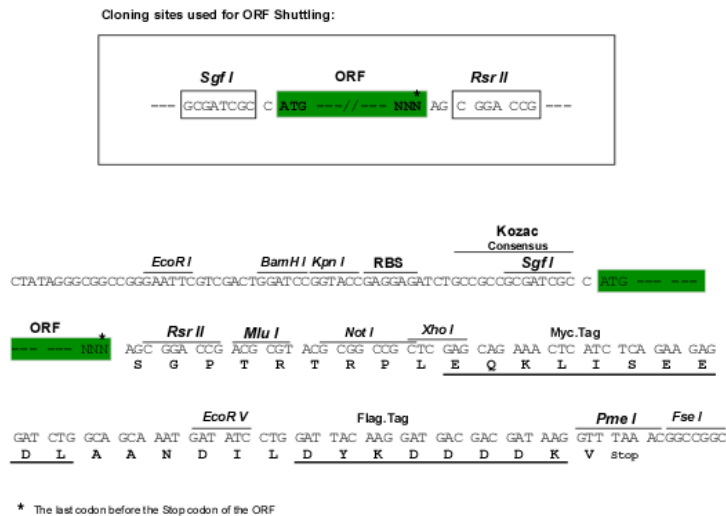
Chromatograms:

https://cdn.origene.com/chromatograms/mm9088_g03.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:



ACCN: NM_007828

ORF Size: 1344 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_007828.2](#), [NP_031854.1](#)

RefSeq Size: 1696 bp

RefSeq ORF: 1347 bp

Locus ID: 13144

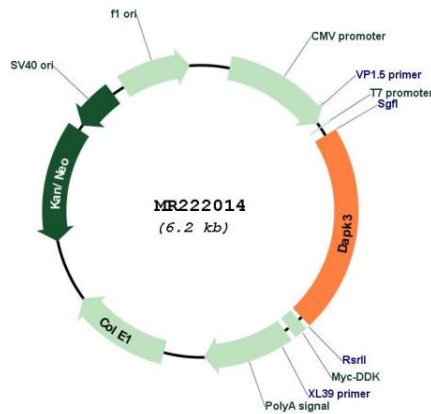
UniProt ID: [O54784](#)

Cytogenetics: 10 39.72 cM

MW: 51.4 kDa

Gene Summary: Serine/threonine kinase which is involved in the regulation of apoptosis, autophagy, transcription, translation and actin cytoskeleton reorganization. Regulates both type I (caspase-dependent) apoptotic and type II (caspase-independent) autophagic cell deaths signal, depending on the cellular setting. Involved in formation of promyelocytic leukemia protein nuclear body (PML-NB). Involved in apoptosis involving PAWR which mediates cytoplasmic relocation; in vitro phosphorylates PAWR (By similarity). Phosphorylates MYL12B in non-muscle cells leading to reorganization of actin cytoskeleton such as in regulation of cell polarity and cell migration. Positively regulates canonical Wnt/beta-catenin signaling through interaction with NLK and TCF7L2; disrupts the NLK-TCF7L2 complex thereby influencing the phosphorylation of TCF7L2 by NLK. Phosphorylates STAT3 and enhances its transcriptional activity. Enhances transcription from AR-responsive promoters in a hormone- and kinase-dependent manner. Phosphorylates histone H3 on 'Thr-11' at centromeres during mitosis (By similarity). Phosphorylates RPL13A on 'Ser-77' upon interferon-gamma activation which is causing RPL13A release from the ribosome, RPL13A association with the GAIT complex and its subsequent involvement in transcript-selective translation inhibition.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222014