OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MG222013

Dapk3 (NM_001190473) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dapk3 (NM_001190473) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dapk3
Synonyms:	dlk; ZIPK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>MG222013 representing NM_001190473
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCACATTCAGGCAAGAGGATGTTGAGGACCATTATGAGATGGGAGAGGAGCTTGGCAGTGGCCAAT
TTGCCATCGTGCGCAAGTGCCAGCAGAAGGGCACGGGCATGGAGTATGCAGCCAAGTTCATCAAGAAGCG
GCGCCTGCCATCCAGCCGGCGCGGTGTGAGCCGGGAGGAGATCGAACGCGAGGTGAGCATCCTGCGCGAG
ATCCGCCACCCCAACATCATAACACTGCATGACGTGTTCGAGAACAAGACAGATGTGGTGCTGATCCTGG
AGCTGGTGTCCGGTGGCGAGCTTTTCGACTTCCTGGCCGAGAAGGAGTCATTGACGGAGGATGAGGCCAC
GCAGTTCCTCAAACAAATCCTAGACGGTGTCCACTACCTGCACTCCAAGCGCATCGCACACTTTGACCTG
AAGCCCGAGAACATCATGTTGCTGGACAAGCACGCAGCCAGCCCCCGCATTAAGCTCATCGACTTTGGCA
TCGCGCACAGGATCGAGGCTGGCAGCGAGTTCAAGAACATCTTTGGCACACCCGAGTTTGTCGCCCCCGA
GATCGTGAACTATGAGCCACTTGGCTTGGAGGCTGACATGTGGAGCATTGGCGTCATCACCTACATCCTC
CTGAGCGGAGCGTCCCCATTCCTGGGCGAGACCAAGCAGGAGACGCTGACGAACATCTCAGCAGTGAACT
ATGACTTTGATGAGGAATACTTCAGCAGCACCAGCGAGCTGGCCAAGGACTTCATCCGCAGGCTGCTGGT
CAAAGACCCCAAGAGGAGGATGACCATCGCACAGAGCCTGGAGCATTCCTGGATCAAGGTGCGCAGGCGC
GAGGACGGCGCCCGGAAGCCAGAGCGACGGCGGCTGCGCGCCGCGCGCCTGCGCGAGTACAGCCTCAAGT
CCCACTCGAGCATGCCGCGCAACACGAGCTACGCCAGCTTCGAGCGCTTCTCACGCGTGCTGGAGGACGT
GGCGGCGGCAGAGCAGGGGCTGCGCGAGCTGCAGCGAGGCAGGCGCCAGTGCCGGGAGCGCGTGTGTGCG
CTGCGCGCGGCCGCCGAGCAGCGGGAGGCGCGCTGCCGCGACGGGAGTGCAGGGCTAGGGCGCGACCTGC
GACGCCTGCGCACGGAGCTGGGGCGCACCGAGGCTCTGCGCACGCGCGCGCAGGAGGAGGCGCGGGCGGC
GCTGTTGGGTGCCGGGGGCCTGAAGCGTCGCCTGTGTCGCCTGGAGAACCGTTACGACGCGCTAGCCGCT
CAGGTGGCCGCTGAGGTGCAATTCGTGCGCGACCTGGTGCGTGCGCTGGAGCAGGAACGGCTGCAGGCTG
AGTGCGGCGTGCGC

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

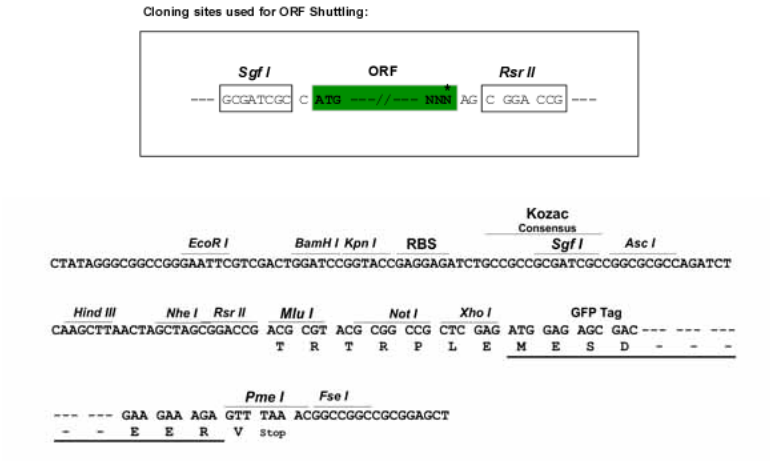
>MG222013 representing NM_001190473
Red=Cloning site Green=Tags(s)

MSTFRQEDVEDHYEMGEELGSGQFAIVRKCQQKGTGMEYAAKFIKKRRLPSSRRGVSREEIEREVSILRE
IRHPNIITLHDVFENKTDVVLILELVSGGELFDFLAEKESLTEDEATQFLKQILDGVHYLHSKRIAHFDL
KPENIMLLDKHAASPRIKLIDFGIAHRIEAGSEFKNIFGTPEFVAPEIVNYEPLGLEADMWSIGVITYIL
LSGASPFLGETKQETLTNISAVNYDFDEEYFSSTSELAKDFIRRLLVKDPKRRMTIAQSLEHSWIKVRRR
EDGARKPERRRLRAARLREYSLKSHSSMPRNTSYASFERFSRVLEDVAAAEQGLRELQRGRRQCRERVCA
LRAAAEQREARCRDGSAGLGRDLRRLRTELGRTEALRTRAQEEARAALLGAGGLKRRLCRLENRYDALAA
QVAAEVQFVRDLVRALEQERLQAECGVR

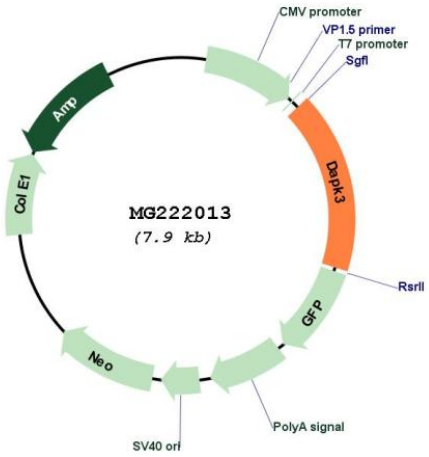
SGPTRTRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM_001190473

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_001190473.1, NP_001177402.1
RefSeq Size:	1676 bp
RefSeq ORF:	1347 bp
Locus ID:	13144
UniProt ID:	O54784
Cytogenetics:	10 39.72 cM
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]