

Product datasheet for MR219946

Drg1 (NM_007879) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Drg1 (NM_007879) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Drg1
Synonyms:	AA408859; AI132520; DRG-1; NEDD-3; Nedd3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR219946 representing NM_007879 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCGGGACCTTAGCGAAGATCGCGGAGATCGAAGCCGAGATGGCTCGGACTCAGAAGAACAAGCCA
CAGCTCATCACCTTGGCCTGCTTAAGGCTCGCCTTGCTAACTTCGAAGAGAAGCTCATCACTCCTAAAGG
TGGCGGCGGGGGGGCCAGGAGAAGGTTTGTGTGGCCAAGACAGGTGATGCTCGAATTGGGTTTGTG
GGTTTTCCATCTGTGGGAAATCAACTCTGCTAAGTAAGTTCAGCAGGAGTGTATTCTGAAGTGGCAGCCT
ATGAATCACTACATTGACCACAGTGCCTGGTGTATCAGATATAAAGGTGCCAAGATCCAGCTCCTGGA
TCTCCCGGTATTATTGAAGGTGCCAAGGATGGGAAAGGTAGAGGTCTCAAGTCATTGCAGTGGCCCGA
ACGTGTAATTTGATTTTGTGTTCTGGATGTCCTAAAACCTTGGGACATAAGAAGATAATTGAAAATG
AGTTGGAAGGCTTTGGGATTCGCTTGAACAGCAAAACCCCAACATTGGCTTTAAGAAGAAAGACAAGGG
AGGCATTAACCTCACAGCCACTTGTCTCAGAGTGAAGTGGATGCTGAAACAGTGAAGAGCATTCTGGCT
GAATATAAGATTCATAATGCTGATGTGACTTTGCGTAGTGATGCCACAGCTGACGACCTCATTGACGTGG
TCGAAGGGAACAGAGTTTATATCCCTGTATCTATGTATTAATAAGATTGATCAGATCTCCATTGAGGA
GTTGGATATTATCTATAAGGTGCCTCACTGTGTACCCATCTCTGCTCATCACCGCTGGAATTTTGTGAC
CTTTGGAGAAAATCTGGGACTATCTGAAACTAGTGAGAATTTACACAAACCGAAGGCCAGTTACCGA
ATTACACATCTCCAGTAGTGTGCCTTATTCTAGGACCACTGTGGAAGATTTCTGCATGAAGATTACAA
AAATCTCATCAAAGAATTTAAATATGCTTTGGTCTGGGGTCTGTCTGTGAAACATAATCCTCAGAAAGTG
GGTAAAGACCACACATTGGAAGATGAAGACGTCATTTCAGATTGTGAAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >MR219946 representing NM_007879
Red=Cloning site Green=Tags(s)

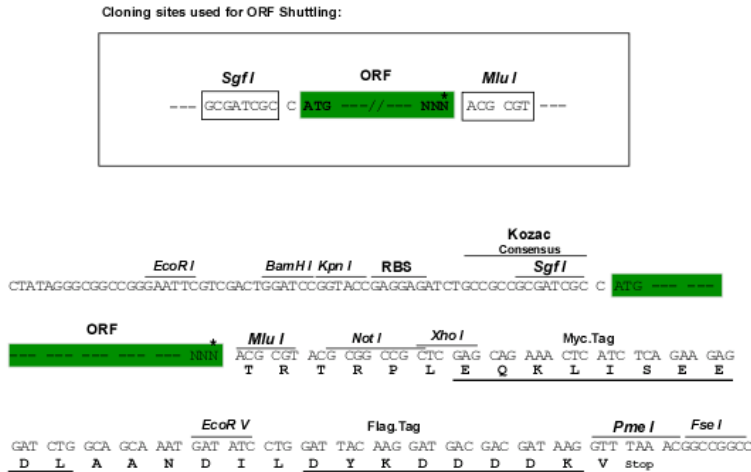
MSGTLAKIAEIEAEMARTQKNKATAHHLGLLKARLAKLRRELITPKGGGGGPGEGFDVAKTGDARIGFV
 GFPSVGKSTLLSNLAGVYSEVAAYEFTLLTTPGVIRYKGAQIQLLDLPGIIEGAKDGKGRQVI⁺AVAR
 TCNLILIVLDVLKPLGHKKIIENELEGFIRLNSKPPNIGFKKDKGGINLTATCPQSELD⁺AEVKSILA
 EYKIH⁺NADVTLRSDATADDLIDVVEGNRVYIPCIYVLNKIDQISIEELDIYKVP⁺HCVPISAHHRWNFDD
 LLEKIWDYLKLVRIYTKPKGQLPDY⁺TSPVVL⁺PYSRTT⁺VEDFCMKIHK⁺NLIKEFKYALVWGLSVK⁺HNPQKV
 GKDH⁺TLEDEDVIQIVKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9057_d11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_007879

ORF Size: 1101 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_007879.2](#)

RefSeq Size: 1524 bp

RefSeq ORF: 1104 bp

Locus ID: 13494

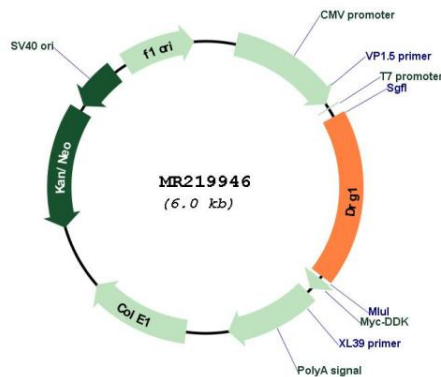
UniProt ID: [P32233](#)

Cytogenetics: 11 A1

MW: 40.5 kDa

Gene Summary: Catalyzes the conversion of GTP to GDP through hydrolysis of the gamma-phosphate bond in GTP. Appears to have an intrinsic GTPase activity that is stimulated by ZC3H15/DFRP1 binding likely by increasing the affinity for the potassium ions. When hydroxylated at C-3 of 'Lys-22' by JMJD7, may bind to RNA and play a role in translation. Binds to microtubules and promotes microtubule polymerization and bundling that are required for mitotic spindle assembly during prophase to anaphase transition. GTPase activity is not necessary for these microtubule-related functions.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR219946