

Product datasheet for RC201259

DRG1 (NM_004147) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DRG1 (NM_004147) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DRG1
Synonyms:	NEDD3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201259 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCAGCACCTTAGCTAAGATCGCGGAGATAGAAGCAGAGATGGCTCGGACTCAAAGAACAAGGCCA
CAGCACACCACTTAGGGCTGCTTAAGGCTCGTCTTGCTAAGCTTCGTCGAGAACTCATTACTCCAAAGGG
TGGTGGTGGTGGAGGTCCAGGAGAAGGTTTTGATGTGGCCAAGACAGGTGATGCTCGAATTGGATTTGTT
GGTTTTCCATCTGTGGGAAGTCAACACTGCTTAGTAACCTGGCAGGGGTATATTCTGAGGTGGCAGCCT
ATGAATCACTACTCTGACCACTGTGCCTGGTGTGCATCAGATACAAAGGTGCCAAGATCCAGCTCCTGGA
TCTCCCAGGTATCATTGAAGGTGCCAAGGATGGGAAAGGTAGAGGTCTCAAGTCATTGCAGTGGCCCGA
ACCTGTAACCTTGATCTTGATTGTTCTGGATGTCCTGAAACCTTTGGGACATAAGAAGATAATTGAAAATG
AGCTGGAAGGCTTTGGCATTTCGCTTGAACAGCAAACCCCAACATTGGCTTTAAGAAGAAGGACAAGGG
AGGCATTAATCTCACAGCCACTTGCCCCAGAGTGAGCTGGATGCTGAACTGTGAAGAGCATTCTGGCT
GAATACAAGATTCATAATGCCGATGTGACTCTACGTAGTGATGCTACAGCTGATGACCTCATTGATGTGG
TGAAGGAAACAGAGTTTATATCCCTGTATCTATGTGTTAAATAAGATTGACCAATCTCCATTGAGGA
ATTGGATATCATCTATAAGGTGCCTCACTGTGTACCCATCTCTGCCATCACCGCTGGAATTTTGATGAC
CTATTGGAAAAGATCTGGGACTATCTGAAACTAGTGAGAATTTACACCAAACCAAGGCCAGTTACCAG
ATTACACATCCCCAGTGGTCTTCTTACTCCAGGACCACAGTGGAGGATTTCTGCATGAAGATTCACAA
AAATCTTATCAAAGAATTTAAATATGCTCTGGTCTGGGGTCTCTCTGTGAAACACAATCCTCAGAAAGTG
GGTAAAGACCATACGTTGGAGGATGAGGATGTCATTCAAATTTGTGAAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

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_004147.4](#)

RefSeq Size: 1467 bp

RefSeq ORF: 1104 bp

Locus ID: 4733

UniProt ID: [Q9Y295](#)

Cytogenetics: 22q12.2

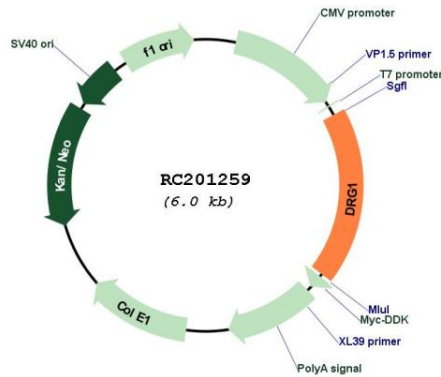
Domains: TGS, GTP1_OBG

Protein Families: Transcription Factors

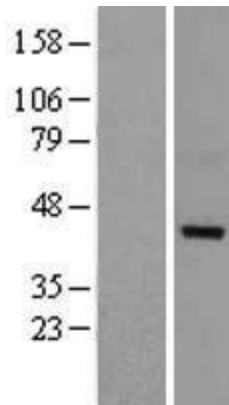
MW: 40.5 kDa

Gene Summary: Catalyzes the conversion of GTP to GDP through hydrolysis of the gamma-phosphate bond in GTP (PubMed:29915238, PubMed:23711155). Appears to have an intrinsic GTPase activity that is stimulated by ZC3H15/DFRP1 binding likely by increasing the affinity for the potassium ions (PubMed:23711155). When hydroxylated at C-3 of 'Lys-22' by JMJD7, may bind to RNA and play a role in translation (PubMed:19819225, PubMed:29915238). Binds to microtubules and promotes microtubule polymerization and stability that are required for mitotic spindle assembly during prophase to anaphase transition. GTPase activity is not necessary for these microtubule-related functions (PubMed:28855639).[UniProtKB/Swiss-Prot Function]

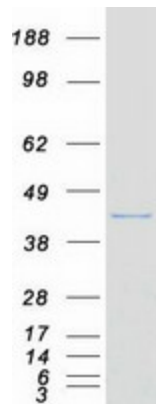
Product images:



Circular map for RC201259



Western blot validation of overexpression lysate (Cat# [LY401336]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201259 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DRG1 protein (Cat# [TP301259]). The protein was produced from HEK293T cells transfected with DRG1 cDNA clone (Cat# RC201259) using MegaTran 2.0 (Cat# [TT210002]).