

Product datasheet for **RC205403**

DDI1 (NM_001001711) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DDI1 (NM_001001711) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DDI1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205403 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGATCACCGTGTACTGCGTGCGGAGGGACCTCTCCGAGGTCACCTTCTCTCTCCAGGTCAGCCCCG
ACTTTGAGCTCCGAACTTCAAGGTCCTCTGCGAAGCGGAGTCCAGAGTCCCCGTGAAGAGATCCAGAT
CATCCACATGGAGCGACTCCTCATCGAGGACCACTGTTCCCTGGGCTCCTACGGCCTCAAAGATGGCGAT
ATCGTGGTTTTACTGCAGAAGGACAATGTGGGACCTCGGGCTCCAGGCGTCCCCGAACCCAGCCTCGTG
TAGACTTCAGTGGCATTGCGGTGCCTGGGACCTCCAGCTCCCGTCCACAGCACCCCTGGACAGCAGCAGCA
GCGCACACCCGCTGCCAGCGGTCACAGGGCTTGGCGTCAAGAGAGAAGGTGGCCGGCCTGCAAGGTCTG
GGCAGCCCCGCCCTGATCCGCAGCATGCTGCTCTCCAACCCACGATCTGTCCCTGCTCAAGGAACGCA
ACCCTCCCTTGGCGGAAGCCCTGCTCAGCGGAAGCCTTGAGACCTTTTCTCAGGTGCTGATGGAGCAGCA
AAGGGAAAAGGCCTTGAGAGAGCAAGAGAGGCTTCGTCTCTACACAGCCGACCCACTGGATCGGGAAGCT
CAGGCCAAAATAGAAGAGGAAATCCGGCAGCAAAACATTGAAGAAAACATGAATATAGCGATAGAAGAGG
CCCCGAGAGTTTTGGACAAGTGACGATGCTCTACATTAAGTGAAGTGAATGGGCATCCTTTGAAGGC
TTTTGTTGACTCGGGCGCCAGATGACCATTATGAGCCAGGCTTGTGCCAGCGATGAACATCATGAGG
CTGGTGGACCGACGGTGGGCTGGGTTGCTAAAGGAGTGGGCACACAGAGAATTATGGCCGTGTTTCATC
TAGCTCAGATTCAAATGAAGGTGATTTCTTACAGTGCTTTTCTCCATACTTGAGGATCAACCCATGGA
TATGCTTCTAGGCCTAGATATGCTCCGGAGACATCAATGTTCCATCGATTTGAAGAAAAATGTGCTGGTC
ATCGGCACCACTGGCAGCGAGACTTATTTTCTTCTGAGGGAGAGTTGCCCTTATGCTCTAGGATGGTAA
GTGGGCAAGATGAGTCTTCGGACAAGGAAATTACACATTCAGTCATGGATTCAGGACGAAAAAGACAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205403 protein sequence
Red=Cloning site Green=Tags(s)

MLITVYCVRRDLSEVTFSLQVSPDFELRNFKVLCEASRPVVEEIQI IHMERLLIEDHCSLGSYGLKGDG
 IVVLLQKDNVGPAPGRAPNQPRVDFSGIAVPGTSSSRPQHPGQQQRTTAAQRSQGLASGEKVAGLQGL
 GSPALIRSMLLSNPHDL SLLKERNPPLAEALLSGSLETF SQVLM EQQREKALREQERLRLYTADPLDREA
 QAKIEEIRQQNIEENMNI AIEEAPESFGQVTMLYINCKVNGHPLKAFVDSGAQMTIMSQACAERCNIMR
 LVDRRWAGVAKGVGTQRI IGRVHLAQIQIEGDFLQCSFSILEDQPM DMLLGLDMLRRHQCSIDLKKNLVY
 IGTTGTQTYFLPEGELPLCSRMVSGQDESSDKEITHSVMSGRKEH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6315_g04.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001001711

ORF Size: 1188 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_001001711.1](#), [NP_001001711.1](#)

RefSeq Size: 2615 bp

RefSeq ORF: 1191 bp

Locus ID: 414301

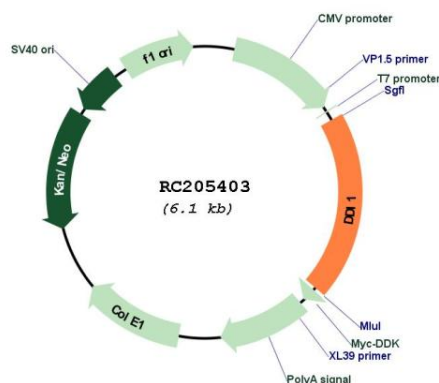
UniProt ID: [Q8WTU0](#)

Cytogenetics: 11q22.3

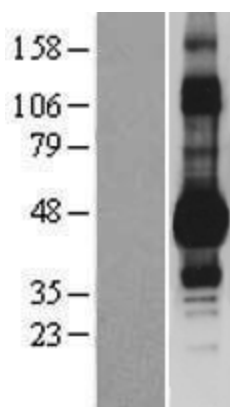
MW: 44.1 kDa

Gene Summary: Probable aspartic protease (Probable). Seems to act as a proteasomal shuttle which links the proteasome and replication fork proteins like RTF2 (Probable). Required, with DDI2, for cellular survival following replication stress. Together or redudantly with DDI2, removes RTF2 from stalled forks to allow cell cycle progression after replication stress and maintains genome integrity (PubMed:29290612).[UniProtKB/Swiss-Prot Function]

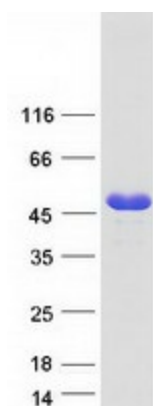
Product images:



Circular map for RC205403



Western blot validation of overexpression lysate (Cat# [LY424216]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205403 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DDI1 protein (Cat# [TP305403]). The protein was produced from HEK293T cells transfected with DDI1 cDNA clone (Cat# RC205403) using MegaTran 2.0 (Cat# [TT210002]).