

Product datasheet for RC203020

C12orf32 (NM_031465) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C12orf32 (NM_031465) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C12orf32
Synonyms:	chromosome 12 open reading frame 32; HKMT1188; HKMT1188, MGC13204; MGC13204
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203020 representing NM_031465 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCTCCAGAAAAAACGCCGCGCAGCCTTCCCAGAAAGCCCCGCTGCTGTTCCACCAACAACCACTGG
AGGGCCCCAACACAGCTGTGCATCTACACAGCTTCCATCACTCACACTCGACAGGTGCCAGCAAGCC
CATTGACCACAGCACCATCACTTCTGGGTATCACCTGATTTTGATACAGCAGCAGGAAGCTTGTCCCA
GCCTACCAGAAACACAAAACCGGGCGAGACACTCAAGTCGAAAACCTACCACCTCCAAGTTTCCACATC
TAACTTTTGAGAGTCCGCAATCTCCAGTTCAGAGACATTGGGGATCCCCTTAATCCGAGAGTGCCCCAG
TGAATCAGAAAAGGATGTTTCCAGAAGACCCTTAGTTCAGTGCTCAGTCCCAAAGCTGTGGGAACATG
TCAGTGCAGGCACCTTCAGAGCTTACCTTATGTGTTTCATTCCACCTGATATCCAGACCCCAGAGTCATCAT
CTGTGAAGGAAGAACTCATTCCCAAGATCAGAAGGAAAACAGCCTTCTAAGCTGCACTCTTCACTGG
CACTCCTAATAGCCCAGAGCCTGGACCTGTTCTGGTTAAAGACACCCCGAGGACAAGTATGGAATAAAG
GTCACATGGAGGAGACGACAGCACCTGCTTGCTTACCTCAGGGAGAGGGGAAGCTGAGCAGAAGCCAAT
TCCTTGAAAAAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC203020 representing NM_031465
Red=Cloning site Green=Tags(s)

MPPRKRRRQPSQKAPLLFHQQPLEGPKHSCASTQLPITHTRQVPSKPIDHSTITSWVSPDFDTAAGSLFP
 AYQKHQNRARHSSRKPTTSKFPHLTFESPQSSSSETLGIPLIRECPSESEKDVSRRLVPVLSPOSCGNM
 SVQALQSLPYVFIPDDIQTPESSSVKEELIPQDQKENSLLSCTLHTGTPNSPEPGPVLVKDTPEDKYGIK
 VTWRRRQHLLLAYLRERGLSRSQFLVKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6411_b06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_031465

ORF Size: 714 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_031465.2](#), [NP_113653.1](#)

RefSeq Size: 1872 bp

RefSeq ORF: 716 bp

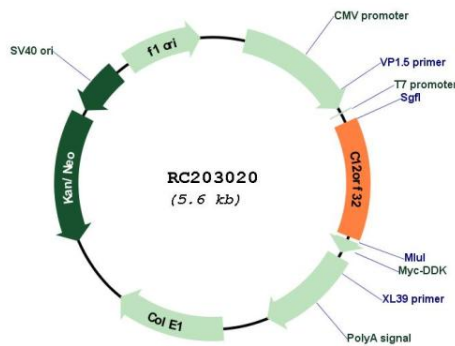
Locus ID: 83695

Cytogenetics: 12p13.33

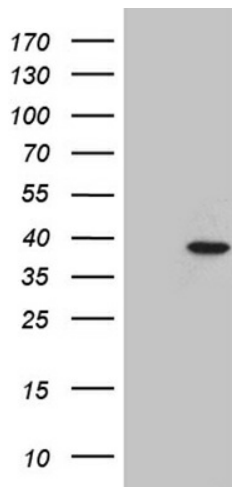
MW: 26.5 kDa

Gene Summary: Plays a role in DNA damage response (DDR) signaling upon genotoxic stresses such as ionizing radiation (IR) during the S phase. Recruited to sites of DNA damage through interaction with the 9-1-1 cell-cycle checkpoint response complex and TOPBP1 in a ATR-dependent manner. Required for the progression of the G1 to S phase transition. Plays a role in the stimulation of CHEK1 phosphorylation.[UniProtKB/Swiss-Prot Function]

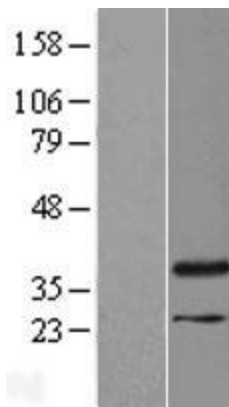
Product images:



Circular map for RC203020



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY C12orf32 (Cat# RC203020, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-C12orf32 (Cat# [TA811314])(1:500). Positive lysates [LY410499] (100ug) and [LC410499] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY410499]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203020 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).