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Product datasheet for RC202727

HUS1 (NM_004507) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HUS1 (NM_004507) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HUS1
Synonyms:	hHUS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC202727 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGTTTCGGGCCAAGATCGTGGACGGGGCCTGTCTGAACCACTTCACACGAATCAGTAACATGATAG
CCAAGCTTGCCAAAACCTGCACCCTCCGCATCAGCCCTGATAAGCTTAACTTCATCCTTTGTGACAAGCT
GGCTAATGGAGGAGTGAGCATGTGGTGTGAGCTGGAACAGGAGAACTTCTTCAACGAATTTCAAATGGAG
GGTGTCTCTGCAGAAAACAATGAGATTTATTTAGAGCTAACATCGGAAAACTTATCTCGAGCCTTGAAGA
CTGCCCAGAATGCCAGGGCTTTGAAAATCAAACTGACTAATAAACACTTTCCCTGCCTCACGGTCTCCGT
GGAGCTGTTATCTATGTCAAGCAGTAGCCGCATTGTGACCCATGACATCCCCATAAAGGTGATTCCTAGG
AAATTGTGGAAGGACTTACAAGAACCGGTGGTCCCAGATCCTGATGTTAGTATTTATTTACCAGTCTTGA
AGACTATGAAGAGTGTTGTGGAAAAAATGAAAAACATCAGCAATCACCTTGTTATTGAAGCAAACCTAGA
TGGAGAATTGAATTTGAAAATAGAAACTGAATTAGTATGTGTTACAACTCATTTTAAAGATCTTGGAAAT
CCTCCATTAGCCTCTGAAAGCACCCATGAGGACAGAAACGTGGAACACATGGCTGAAGTGCACATAGATA
TTAGGAAGCTCCTACAGTTTCTTGCTGGACAACAAGTAAATCCCACAAAGGCCTTATGCAATATTGTGAA
TAACAAGATGGTGCATTTTGATCTGCTTCATGAAGACGTGTCCCTTCAGTATTTCATCCCTGCGCTGTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC202727 protein sequence
Red=Cloning site Green=Tags(s)

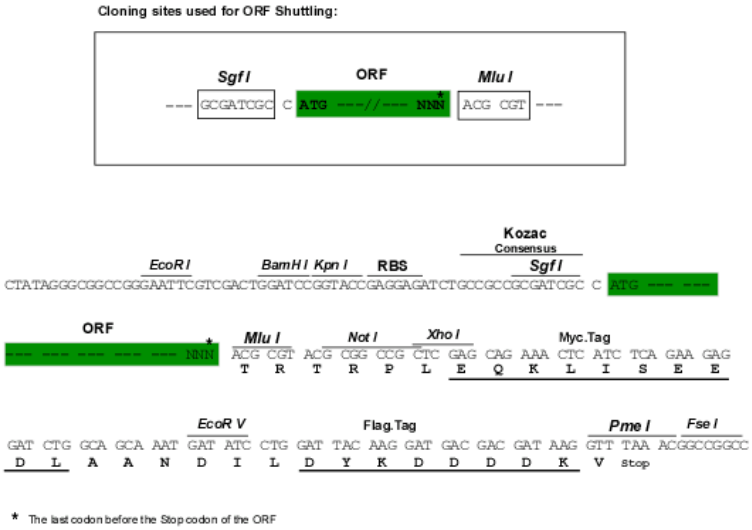
MKFRAKIVDGACLNHFTRISNMIAKLAKTCTLRISPDKLNFILCDKLANGGVSMWCELEQENFFNEFQME
GVSAENNEIYLELTSENLSRALKTAQNARALKIKLTNKHFPCLTVSVELLSMSSSSRIVTHDIPIKVIPR
KLWKDLQEPVVPDPDVSIYLPVLKTMKSVVEKMKNISNHLVIEANLDGELNLKIETELVCVTTHFKDLGN
PPLASESTHEDRNVEHMAEVHIDIRKLLQFLAGQQVNPTKALCNIVNNKMVHFDLLHEDVSLQYFIPALS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6145_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004507

ORF Size: 840 bp

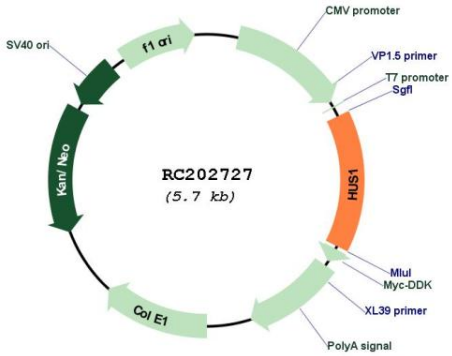
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

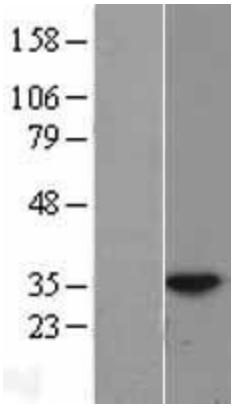
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004507.4
RefSeq Size:	3033 bp
RefSeq ORF:	843 bp
Locus ID:	3364
UniProt ID:	O60921
Cytogenetics:	7p12.3
Domains:	Hus1
Protein Families:	Druggable Genome
MW:	31.7 kDa
Gene Summary:	The protein encoded by this gene is a component of an evolutionarily conserved, genotoxin-activated checkpoint complex that is involved in the cell cycle arrest in response to DNA damage. This protein forms a heterotrimeric complex with checkpoint proteins RAD9 and RAD1. In response to DNA damage, the trimeric complex interacts with another protein complex consisting of checkpoint protein RAD17 and four small subunits of the replication factor C (RFC), which loads the combined complex onto the chromatin. The DNA damage induced chromatin binding has been shown to depend on the activation of the checkpoint kinase ATM, and is thought to be an early checkpoint signaling event. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2011]

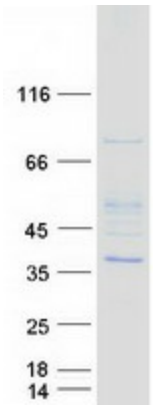
Product images:



Circular map for RC202727



Western blot validation of overexpression lysate (Cat# [LY401435]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202727 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HUS1 protein (Cat# [TP302727]). The protein was produced from HEK293T cells transfected with HUS1 cDNA clone (Cat# RC202727) using MegaTran 2.0 (Cat# [TT210002]).