

Product datasheet for **RC238893**

Ku70 (XRCC6) (NM_001288978) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ku70 (XRCC6) (NM_001288978) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	XRCC6
Synonyms:	CTC75; CTCBF; G22P1; KU70; ML8; TLAA
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238893 representing NM_001288978
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAAGAAGCAGAGGAAGAACAAGAAGAGAACCTTGAAGCAAGTGTGTATCCAAAGTGTGTACATCAGTA
 AGATCATAAGCAGTGATCGAGATCTCTGGCTGTGGTGTCTATGGTACCGAGAAAGACAAAAATTCAGT
 GAATTTTAAAAATATTTACGCTTACAGGAGCTGGATAATCCAGGTGCAAAACGAATTCAGAGCTTGAC
 CAGTTTAAAGGGCAGCAGGGACAAAAACGTTTCCAAGACATGATGGGCCACGGATCTGACTACTCACTCA
 GTGAAGTGTGTGGTCTGTGCCAACCTCTTAGTGATGTCCAATTCAAGATGAGTCATAAGAGGATCAT
 GCTGTTACCAATGAAGACAACCCCATGGCAATGACAGTGCCAAAGCCAGCCGGGCCAGGACCAAAAGCC
 GGTGATCTCCGAGATACAGGCATCTTCTTGACTTGATGCACCTGAAGAAACCTGGGGCTTTGACATAT
 CCTTGTCTACAGAGATATCATCAGCATAGCAGAGGATGAGGACCTCAGGGTTCACCTTGAGGAATCCAG
 CAAGCTAGAAGACCTGTTGCGGAAGGTTGCGCCAAGGAGACCAGGAAGCGAGCACTCAGCAGGTTAAAG
 CTGAAGCTCAACAAAGATATAGTGATCTCTGTGGCATTATAATCTGGTCCAGAAGGCTCTCAAGCCTC
 CTCCAATAAAGCTCTATCGGGAACAAATGAACCAAGTGAACCAAGACCCGGACCTTTAATACAAGTAC
 AGGCGGTTTGCTTCTGCCTAGCGATACCAAGAGGTCTCAGATCTATGGGAGTCTGCAGATTATACTGGAG
 AAAGAGGAAACAGAAGAGCTAAAACGGTTTGATGATCCAGGTTTGATGCTCATGGGTTTCAAGCCGTTGG
 TACTGTGAAGAAACACCATTACCTGAGGCCCTCCCTGTTCTGTGTACCCAGAGGAGTCTGCTGGTATTGG
 GAGCTCAACCTGTTCAAGTCTGTCTCATCAAGTGTCTGGAGAAGGAGGTTGCAGCATTGTGCAGATAC
 ACACCCCGCAGGAACATCCCTCTTATTTGTGGCTTTGGTCCACAGGAAGAAGAGTTGGATGACCAGA
 AAATTCAGGTGACTCCTCCAGGCTCCAGCTGGTCTTTTACCCTTTGCTGATGATAAAAGGAAGATGCC
 CTTTACTGAAAAAATCATGGCAACTCCAGAGCAGGTGGGCAAGATGAAGGCTATCGTTGAGAAGCTTCGC
 TTCACATACAGAAGTGACAGCTTTGAGAACCCGTGCTGCAGCAGCACTCAGGAACCTGGAGGCCCTTGG
 CCTTGGATTTGATGGAGCCGGAACAAGCAGTGGACCTGACATTGCCCAAGGTTGAAGCAATGAATAAAAG
 ACTGGGCTCCTTGGTGGATGAGTTAAGGAGCTTGTTTACCCACCAGATTACAATCCTGAAGGAAAGTT
 ACCAAGAGAAAACACGATAATGAAGGTTCTGGAAGCAAAAGGCCCAAGGTGGAGTATTAGAAGAGGAGC
 TGAAGACCCACATCAGCAAGGTTACGCTGGGCAAGTTCCTGTGCCCATGCTGAAAGAGGCTGCCGGGC
 TTACGGGCTGAAGAGTGGGCTGAAGAAGCAGGAGCTGCTGGAAGCCCTACCAAGCACTTCCAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238893 representing NM_001288978
 Red=Cloning site Green=Tags(s)

MKKQRKNKKRTLKQVCIQSVYISKIISDRDLLAVVFGTEKDKNSVNFKNIVLQELDNPQAKRILELD
 QFKGQQQKRFQDMMGHGSDYSLSEVLWVCANLFSQVQFKMSHKRIMLFTNEDNPHGNSAKASRARTKA
 GDRLDTGIFLDLMLKPKGGFDISLFYRDIISIAEDELRVHFEESKLEDLRKRVRATEKTRKRALSRK
 LKLNKDIVISVGIYNLVQKALKPPPIKLYRETNEPVKTKTRTFNTSTGGLLLPSDTKRSQIYGSRQIILE
 KEETEELKRFDDPGLMLMGFKPLVLLKHHYLRPSLVYYPEESLVIGSSTLFSALLIKCLEKEVAALCRY
 TPRRNIPPYFVALVPQEEELDDQIQVTPPGFQLVFLPFADDKRKMFPTEKIMATPEQVGMKAIVEKLR
 FTYRSDSFENPVLQQHFRNLEALALDLMEPEQAVDLTLPKVEAMNKRLGSLVDFKELVYPPDYNPEGKV
 TKRKHDNEGSGSRPKVEYSEELKTHISKGTLGKFTVPMLKEACRAYGLKSGLKKQELLEALTKHFQD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

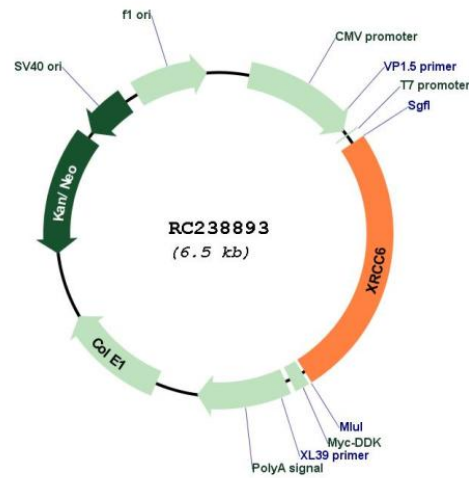
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001288978
ORF Size:	1677 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:	<ol style="list-style-type: none">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_001288978.1 , NP_001275907.1
RefSeq Size:	2165 bp
RefSeq ORF:	1680 bp
Locus ID:	2547
Cytogenetics:	22q13.2
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Non-homologous end-joining
MW:	64.7 kDa
Gene Summary:	The p70/p80 autoantigen is a nuclear complex consisting of two subunits with molecular masses of approximately 70 and 80 kDa. The complex functions as a single-stranded DNA-dependent ATP-dependent helicase. The complex may be involved in the repair of nonhomologous DNA ends such as that required for double-strand break repair, transposition, and V(D)J recombination. High levels of autoantibodies to p70 and p80 have been found in some patients with systemic lupus erythematosus. [provided by RefSeq, Jul 2008]