

Product datasheet for **RC238928**

Ku70 (XRCC6) (NM_001288977) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ku70 (XRCC6) (NM_001288977) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	XRCC6
Synonyms:	CTC75; CTCBF; G22P1; KU70; ML8; TLA
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238928 representing NM_001288977
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCAGGGTGGGAGTCATATTACAAAACCCAGGGCGATGAAGAAGCAGAGGAAGAACAAGAAGAGAACC
 TTGAAGCAAGTGGAGACTATAAATATTCAGGAAGAGATAGTTTGTATTTTTTTGGTTGATGCCTCCAAGGC
 TATGTTTGAATCTCAGAGTGAAGATGAGTTGACACCTTTTGACATGAGCATCCAGGAGCTGGATAATCCA
 GGTGCAAAACGAATTCTAGAGCTTGACCAGTTTAAAGGGCAGCAGGGACAAAACGTTTCCAAGACATGA
 TGGGCCACGGATCTGACTACTCACTCAGTGAAGTGTGTGGTCTGTGCCAACCTCTTGTAGTGTCCA
 ATCAAGATGAGTCATAAGAGGATCATGCTGTTACCAATGAAGACAACCCCATGGCAATGACAGTGCC
 AAAGCCAGCCGGGCCAGGACAAAGCCGGTGTCTCCGAGATACAGGCATCTTCTTGACTTGATGCACC
 TGAAGAAACCTGGGGCTTTGACATATCCTTGTCTACAGAGATATCATCAGCATAGCAGAGGATGAGGA
 CCTCAGGGTTCACTTTGAGGAATCCAGCAAGCTAGAAGACCTGTTGCGGAAGGTTGCGCCAAGGAGACC
 AGGAAGCGAGCACTCAGCAGGTTAAAGCTGAAGCTCAACAAAGATATAGTGATCTCTGTGGGCATTATA
 ATCTGGTCCAGAAGGCTCTCAAGCCTCCTCAATAAAGCTCTATCGGAAACAAATGAACCAAGTGA
 CAAGACCCGGACCTTTAATAACAAGTACAGGCGTTTGGTCTGCTAGCGATACCAAGAGGTCTCAGATC
 TATGGGAGTCGTGAGATTACTGGAGAAAGAGGAAACAGAAGAGCTAAAACGTTTGTATGATCCAGGTT
 TGATGCTCATGGGTTTCAAGCCGTTGGTACTGCTGAAGAAACACCATTACCTGAGGCCCTCCCTGTTCTG
 GTACCCAGAGGAGTCGCTGGTATTGGGAGCTCAACCTGTTCAAGTGTCTGCTCATCAAGTGTCTGGAG
 AAGGAAAGAAGAGTTGGATGACAGAAAATTCAGGTGACTCCTCAGGCTTCCAGCTGGTCTTTTACC
 CACAGGAAGAAGAGTTGGATGACAGAAAATTCAGGTGACTCCTCAGGCTTCCAGCTGGTCTTTTACC
 CTTTGTGATGATAAAAGGAAGATGCCCTTTACTGAAAAAATCATGGCAACTCCAGAGCAGGTGGGCAAG
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 AGCACTTCAGGAACCTGGAGGCCTTGGCCTTGGATTTGATGGAGCCGGAACAAGCAGTGGACCTGACATT
 GCCCAAGGTTGAAGCAATGAATAAAGACTGGGCTCCTTGGTGGATGAGTTTAAAGAGCTTGTATACCCA
 CCAGATTACAATCCTGAAGGAAAGTTACCAAGAGAAAACACGATAATGAAGGTTCTGGAAGCAAAAGGC
 CCAAGGTGGAGTATTAGAAGAGGAGCTGAAGACCCACATCAGCAAGGTCAGTGGGCAAGTTCCTGT
 GCCCATGCTGAAAGAGGCTGCCGGCTTACGGGCTGAAGAGTGGGCTGAAGAAGCAGGAGCTGCTGGAA
 GCCCTACCAAGCACTTCCAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238928 representing NM_001288977
 Red=Cloning site Green=Tags(s)

MSGWESYYKTEGDEEAEEEEQEENLEASGDYKYSGRDSLIFLVDASKAMFESQSEDELTPFDMSIQELDNP
 GAKRILELDQFKGQQGQKRFQDMMGHGSDYSLSEVLWVCANLFSVQFKMSHKRIMLFTNEDNPHGND
 KASRARTKAGDLRDTGIFLDMHLKPKGGFDISLIFYRDIISIAEDEDLRVHFEESSKLEDLLRKVRKET
 RKRALSRLLKLNKDIVISVGIYNLVQKALKPPPILKYRETNEPVKTKTRTFNTSTGGLLLPSDTKRSQI
 YGSRQIILEKEETEELKRFDDPGLMLMGFKPLVLLKHHYLRPSLFVYPEESLVIGSSTLFSALLIKCLE
 KEVAALCRYTPRRNIPPYFVALVPQEEELDDQKIQVTPPGFQLVFLPFADDKRKMFPTEKIMATPEQVQK
 MKAIVEKLRFTYRSDSFENPVLQHFRLNLEALALDLMEPEQAVDLTLPKVEAMNKRGLSVDKELVYP
 PDYNPEGKVTKRKHDNEGSGSKRPKVEYSEEELKTHISKGTGKFTVPLMKEACRAYGLKSLKQELLE
 ALTKHFQD

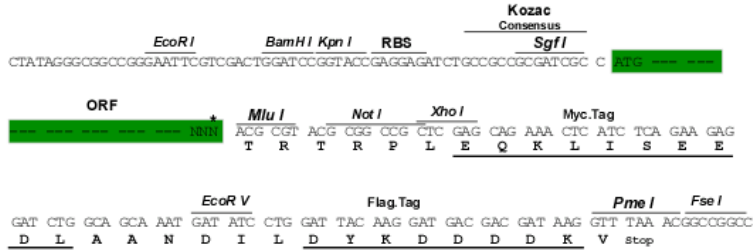
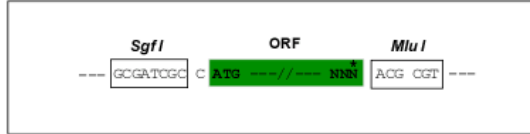
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

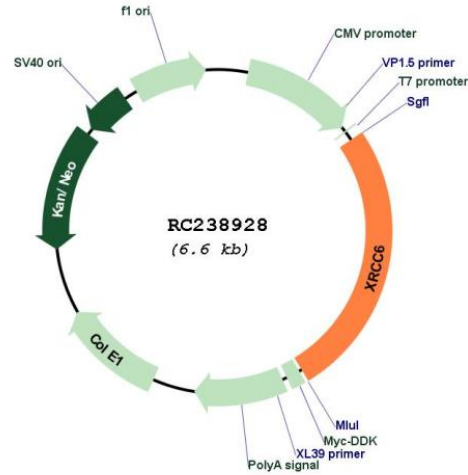
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001288977
 ORF Size: 1704 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_001288977.2
RefSeq Size:	2155 bp
RefSeq ORF:	1707 bp
Locus ID:	2547
UniProt ID:	P12956
Cytogenetics:	22q13.2
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Non-homologous end-joining
MW:	65.6 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]