

Product datasheet for **RC239074**

Ku70 (XRCC6) (NM_001288976) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ku70 (XRCC6) (NM_001288976) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ku70
Synonyms:	CTC75; CTCBF; G22P1; KU70; ML8; TLA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC239074 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCAGGGTGGGAGTCATATTACAAAACCGAGGGCGATGAAGAAGCAGAGGAAGAACAAGAAGAGAACC
 TTGAAGCAAGTGGAGACTATAAATATTCAGGAAGAGATAGTTTGTATTTTTTTGGTTGATGCCTCCAAGGC
 TATGTTTGAATCTCAGAGTGAAGATGAGTTGACACCTTTTGACATGAGCATCCAGTGTATCCAAAGTGTG
 TACATCAGTAAGATCATAAGCAGTGATCGAGATCTCTGGCTGTGGTGTCTATGGTACCGAGAAAGACA
 AAAATTCAGTGAATTTAAAAATATTTACGCTTACAGGAGCTGGATAATCCAGGTGCAAAACGAATTCT
 AGAGCTTGACCAGTTAAAGGGCAGCAGGGACAAAACGTTTCCAAGACATGATGGGCCACGGATCTGAC
 TACTCACTCAGTGAAGTCTGTGGTCTGTGCCAACCTCTTGTGATGTCCAATCAAGATGAGTCATA
 AGAGGATCATGCTGTTACCAATGAAGACAACCCCATGGCAATGACAGTGCCAAAGCCAGCCGGGCCAG
 GACCAAAGCCGGTATCTCCGAGATACAGGCATCTTCTTGACTTGATGCACCTGAAGAAACCTGGGGGC
 TTTGACATATCCTTGTCTACAGAGATATCATCAGCATAGCAGAGGATGAGGACCTCAGGGTTCACCTTG
 AGGAATCCAGCAAGCTAGAAGACCTGTTGCGGAAGGTTCCGCGCAAGGAGACCAGGAAGCCAGCACTCAG
 CAGGTTAAAGCTGAAGCTCAACAAAGATATAGTGATCTCTGTGGGCATTTATAATCTGGTCCAGAAGGCT
 CTCAAGCCTCCTCCAATAAAGCTCTATCGGAAACAAATGAACCAGTGAAAACCAAGACCCGGACCTTTA
 ATACAAGTACAGGCGGTTTGTCTCTGCCTAGCGATACCAAGAGGTCTCAGATCTATGGGAGTCGTGAGT
 TATACTGGAGAAAAGGAAAACAGAAGAGCTAAAACGGTTTGTGATGATCCAGGTTTGTGCTCATGGGTTT
 AAGCCGTTGGTACTGCTGAAGAAAACACCATTACCTGAGGCCCTCCCTGTTCTGTGACCCAGAGGAGTCCG
 TGGTGATTGGGAGCTCAACCTGTTCAAGTCTGCTCATCAAGTGTCTGGAGAAGGAGGTTGCGACAT
 GTGCAGATACACACCCCGAGGAACATCCCTCCTTATTTTGTGGCTTTGGTGCCACAGGAAGAAGAGTTG
 GATGACCAGAAAATTCAGGTGACTCCTCCAGGCTTCCAGCTGGTCTTTTTACCCTTGTGATGATAAAA
 GGAAGATGCCCTTACTGAAAAATCATGGCAACTCCAGAGCAGGTGGGCAAGATGAAGGCTATCGTTGA
 GAAGCTTCGCTTACATACAGAAGTACAGCTTTGAGAACCCCGTCTGCAGCAGCACTTCAGGAACCTG
 GAGGCTTGGCCTTGATTTGATGGAGCCGGAACAAGCAGTGGACCTGACATTGCCCAAGGTTGAAGCAA
 TGAATAAAAGACTGGGCTCCTTGGTGGATGAGTTAAGGAGCTTGTTTACCCACCAGATTACAATCTGA
 AGGAAAAGTTACCAAGAGAAAACAGGATAATGAAGGTTCTGGAAGCAAAAGGCCCAAGGTGGAGTATTCA
 GAAGAGGAGCTGAAGACCACATCAGCAAGGTCGCTGGCAAGTTCCTGTGCCCATGCTGAAAGAGG
 CCTGCCGGCTTACGGGCTGAAGAGTGGGCTGAAGAAGCAGGAGCTGCTGGAAGCCCTACCAAGCACT
 CCAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC239074 protein sequence
 Red=Cloning site Green=Tags(s)

MSGWESYKTEGDEEAEQEEENLEASGDYKYSGRDSLIFLVDASKAMFESQSEDELTPFDMSIQCIQSV
 YISKIISDRDLLAVVFYGTEDKNSVNFKNIVLQELDNPAGAKRILELDQFKGQQGQKRFQDMMHGSD
 YSLSEVLWVCANLFSVQFKMSHKRIMLFTNEDNPHGNDSAKASRARTKAGDLRDTGIFLDMHLKPPGG
 FDISLFYRDIISIAEDEDLRVHFEESKLEDLLRKVRKETRKRALSRLKLNKLDIVISVGIYNLVQKA
 LKPPPIKLYRETNEPVKTKTRTFNTSTGGLLLPSDTKRSQIYGSRQIILEKEETEELKRFDDPGLMLMGF
 KPLVLLKHHYLRPSLFVYPEESLVISSLFSALLIKCLEKEVAALCRYTPRRNIPPYFVALVPQEEEL
 DDQKIQVTPPGFQLVFLPFADDKRKMPFTEKIMATPEQVGKMKAIVEKLRFTYRSDSFENPVLQQHFRNL
 EALALDLMEPEQAVDLTPKVEAMNKRGLSLVDEFKELVPPDYNPEGKVTKRKHDNEGSGSKRPKVEYS
 EEELKTHISKGTLGKFTVPMLKEACRAYGLKSLKQELLEALTKHFQD

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6154_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001288976

ORF Size: 1827 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.

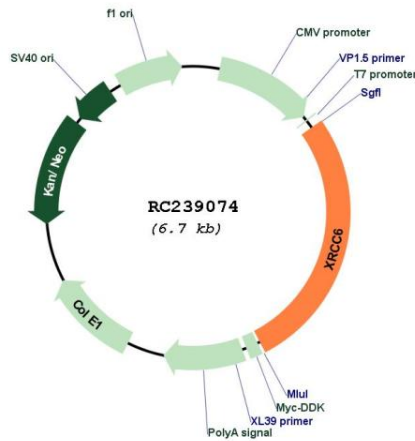
RefSeq: [NM_001288976.2](#)

RefSeq Size: 2164 bp

RefSeq ORF: 1830 bp

Locus ID:	2547
UniProt ID:	P12956
Cytogenetics:	22q13.2
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Non-homologous end-joining
MW:	69.8 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]

Product images:



Circular map for RC239074