

Product datasheet for **SC110901**

Ku70 (XRCC6) (NM_001469) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ku70 (XRCC6) (NM_001469) Human Untagged Clone
Tag:	Tag Free
Symbol:	Ku70
Synonyms:	CTC75; CTCBF; G22P1; KU70; ML8; TLAA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC110901 sequence for NM_001469 edited (data generated by NextGen Sequencing)

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ATGTCAGGGTGGGAGTCATATTACAAAACCGAGGGCGATGAAGAAGCAGAGGAAGAACA  
GAAGAGAACCTTGAAGCAAGTGGAGACTATAAATATTCAGGAAGAGATAGTTTGATTTTT  
TTGGTTGATGCCTCCAAGGCTATGTTTGAATCTCAGAGTGAAGATGAGTTGACACCTTTT  
GACATGAGCATCCAGTGTATCCAAAGTGTGTACATCAGTAAGATCATAAGCAGTGATCGA  
GATCTCTTGGCTGTGGTGTCTATGGTACCGAGAAAGACAAAAATTCAGTGAATTTTAAA  
AATATTTACGTCTTACAGGAGCTGGATAATCCAGGTGCAAAACGAATTCTAGAGCTTGAC  
CAGTTTAAAGGGCAGCAGGGACAAAAACGTTTCCAAGACATGATGGGCCACGGATCTGAC  
TACTCACTCAGTGAAGTCTGTGGGTCTGTGCCAACCTCTTTAGTGATGTCCAATTCAAG  
ATGAGTCATAAGAGGATCATGCTGTTCCACCAATGAAGACAACCCCATGGCAATGACAGT  
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GACTTGATGCACCTGAAGAACTGGGGCTTTGACATATCCTTGTTCTACAGAGATATC  
ATCAGCATAGCAGAGGATGAGGACCTCAGGGTTCACCTTGAGGAATCCAGCAAGCTAGAA  
GACCTGTTGCGGAAGGTTGCGCGCAAGGAGACCAGGAAGCGAGCACTCAGCAGGTTAAAG  
CTGAAGCTCAACAAAGATATAGTGATCTCTGTGGGCATTATAATCTGGTCCAGAAGGCT  
CTCAAGCCTCCTCCAATAAAGCTCTATCGGAAACAAATGAACCAGTGAAAACCAAGACC  
CGGACCTTTAATAACAAGTACAGGCGGTTTGCTTCTGCCTAGCGATACCAAGAGGTCTCAG  
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TACCTGAGGCCCTCCCTGTTGCTGTACCCAGAGGAGTCGCTGGTATTGGGAGCTCAACC  
CTGTTTCAGTCTCTGCTCATCAAGTGTCTGGAGAAGGAGGTTGCAGCATTGTGCAGATAC  
ACACCCCGCAGGAACATCCCTCCTTATTTTGTGGCTTTGGTGCCACAGGAAGAAGAGTTG  
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GATGATAAAAGGAAGATGCCCTTACTGAAAAATCATGGCAACTCCAGAGCAGGTGGGC  
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GAACAAGCAGTGGACCTGACATTGCCCAAGGTTGAAGCAATGAATAAAAGACTGGGCTCC  
TTGGTGGATGAGTTTAAAGGAGCTTGTTTACCCACCAGATTACAATCCTGAAGGGAAAGTT  
ACCAAGAGAAAACACGATAATGAAGGTTCTGGAAGCAAAAGGCCCAAGGTGGAGTATTCA  
GAAGAGGAGCTGAAGACCCACATCAGCAAGGGTACGCTGGGCAAGTTCACTGTGCCCATG  
CTGAAAGAGGCCTGCCGGGCTTACGGGCTGAAGAGTGGGCTGAAGAAGCAGGAGCTGCTG  
GAAGCCCTCACCAAGCACTTCCAGGACTGA
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Clone variation with respect to NM_001469.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001469 unedited
 TTTGTAATACGACTTACTATAGGGCCGCCGCAATTCGGCACGAGGGTTGGTCGCTTCCC
 TGCGCCAAAGTGAGCAGTAGCCAACATGTCAGGGTGGGAGTCATATTACAAAACCGAGGG
 CGATGAAGAAGCAGAGGAAGAACAAGAAGAACCTTGAAGCAAGTGGAGACTATAAATA
 TTCAGGAAGAGATAGTTTGATTTTTTTGGTTGATGCCTCCAAGGCTATGTTTGAATCTCA
 GAGTGAAGATGAGTTGACACCTTTTGACATGAGCATCCAGTGTATCCAAAGTGTGTACAT
 CAGTAAGATCATAAGCAGTGCAGATCTTTGGCTGTGGTGTCTATGGTACCGAGAA
 AGACAAAATTCAGTGAATTTTAAAAATTTTACGTCTTACAGGAGCTGGATAATCCAGG
 TGCAAAAACGAATTCTAGAGCTTGACCAGTTTAAAGGGCAGCAGGGACAAAACGTTTCCA
 AGACATGATGGGCCACGGATCTGACTACTCACTCAGTGAAGTGCTGTGGGTCTGTGCCAA
 CCTCTTTAGTGATGTCCAATTCAAGATGAGTCATAAGAGGATCATGCTGTTACCAATGA
 AGACAACCCCATGGCAATGACAGTGCCAAAGCCAGCCGGGCCAGGACCAAAGCCGGTGA
 TCTCCGAGATACAGGCATCTTCTTGACTTGATGCACCTGAAGAACTGGGGCTNTGA
 CATATNCTTGTCTACAGAGATATCATCAGCATAGCAGAGGATGANGGACCTCAGGGNT
 TCACTTTNGAAAATCCAGCAGCTANAAGACCTGTTGCCGGAAGGGTCGCCCAAGGAGA
 CCCAGAAGCGAGCACTCAGCAGGTTAAAGCTGAAGCTCACAAAGATTTATGATCTTTGG
 GCATTTATATC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001469 unedited
 CTATGGACCGGCCGCCGAATCTAGGATCGAGTTTTTTTTTTTTTTTTTATAGTACAAAC
 TTAGGGCTCTTTATTCAGGCAGTAAAGTAAGGAACAGCAAAGTGGGAGGGCTACACCATC
 ACCATGGCAACAGAAAGCCTCAAAAACATAAAGTCCCTCGACTTATGTCGGGTAGACTCT
 TCCTAGCTCAGGAGAAACACATTTTAACTGGCTGAGGACAAGGCCAGGCAGCCTGGCCAC
 ACTGCGGAAGGGCAGCTGGACGCGCGGCCTCTGGTCAGTCTGGAAGTGCTTGGTGAAGG
 CTTCCAGCAGCTCCTGCTTCTCAGCCACTCTCAGCCCGTAAGCCCGCAGGCCTCTT
 TCAGCATGGGCACAGTGAAGTGGCCAGCGTACCCTTGCTGATGTGGGTCTCAGCTCCT
 CTTCTGAATACTCCACTTGGGCCTTTTGCTTCCAGAACCTTCATTATCGTGTCTTCTCT
 TGGTAACTTTCCCTTCAGGATTGTAATCTGGTGGGTAACAAGCTCCTTAAACTCATCCA
 CCAAGGAGCCCACTTTTATTCATTGCTTCAACCTTGGGCAATGTCAGGTCCACTGCTT
 GTTCCGGCTCCATCAAATCCAAGGCCAAGGCCTNCAGGTTCTGAGTGTGCTGCTGCAGCA
 CGGNGTTCTCANAGCTGTCACTTCTGTATGTGAAGCGAAGCTTCTCAACGATAGCCTTCA
 TCTTGCCACCTGCGTCTGGAGTGCCATGATTNTTTCAGTAAAGGCATCTTCTTTTAT
 CATCAGCAAAGGGTAAAAAGACCAGCTGGAAGCCTGGAGGAGTCACCTNNGAATTTCTGG
 TCATCCAACTCTNCTTCTGTGGGCACCAAAGCCACAATAAGGAGGGATGTNCTGCGGG
 TGTGTATCTGCACATGCTGCACCCTCTTNCAGACACTGAGAGCANACACTGNACAGGTT
 GAGCNCCCATACAGC

Restriction Sites:

NotI-NotI

ACCN:

NM_001469

Insert Size:

2240 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001469.3 , NP_001460.1
RefSeq Size:	2156 bp
RefSeq ORF:	1830 bp
Locus ID:	2547
UniProt ID:	P12956
Cytogenetics:	22q13.2
Domains:	SAP, Ku_C, Ku_N, ku
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Non-homologous end-joining
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest protein (isoform 1). Variants 1 and 2 encode the same protein.</p>