

Product datasheet for **SC120325**

WHIP (WRNIP1) (NM_130395) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	WHIP (WRNIP1) (NM_130395) Human Untagged Clone
Tag:	Tag Free
Symbol:	WHIP
Synonyms:	bA420G6.2; CFAP93; FAP93; WHIP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_130395, the custom clone sequence may differ by one or more nucleotides

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ATGGAGGTGAGCGGGCCGGAAGACGACCCCTTCCTTCGAGCTGCACCAGTGCAGTGCCCGTGTGCC
AGCAGATGATGCCC GCCGCACATCAACTCGACCTGGACCGTGTCTGCTGCCACCCGGCGGGGCA
CGCGAGATCCCGCGGGTCCGACCCGCGGGGAGCGGGCAAGGGGCCCTCGCCGCCGGCGCAAG
AGGCGGGCGTGTGAGAGCTCGGCGCTGAAGCAGCCAGCCACCCGACGGCAGCCGAGAGCAGCGAGG
GCGAGGGTGAGGAGGGCAGCAGCGGCGGAGACCCGAGAGCCGCGAGAGCTACGACGCGCCGCCACACC
CAGCGGGCCCGCTTATCCCGACTTCCCGTGGCCGCTCCAGCAGCCCGGGAGGAAGGGTTCGGGG
AAGAGGCCGGCGCCGCCCGCGGGGAGCGCTCTCCGCGAGCTGGGACGAGGGGAGGCGCAGG
AGGAGGAGGAGCCGTGGGCGACGGCGATGGCGACGGGGACGGGACGGGACGGGACGAGGACGCCGGG
GCACTGGGACGCGGACGCTGCCAAGCCGCCACCGCTTCGGGGCAGTGGCGGGGGCCGCCGACCC
CGGGCGTGGCTGCCGAGGATCCGACAGATGCTACAGGGCAAGCCGCTGGCCGACACGATGCGTCTG
ACACGCTGCAGGATTACTTCGGGCAGAGCAAGGCCGTGGCCAGGATACCCTGCTGCGCTGCTCCTGGA
GACCAACGAAATCCCCTCGCTTATCCTGTGGGGCCGCCGGGCTGCGGCAAGACCACTCTGGCTCACATC
ATAGCCAGCAACAGCAAGAAACATAGCATAAAGTTTGTGACATTATCTGCAACAAATGCCAAGACAAATG
ATGTGCGAGATGTCATAAAACAAGCTCAAAATGAAAAGAGCTTTTCAAAGGAAAACCATCCTTTTAT
TGATGAGATTCATCGTTCAATAAATCTCAGCAGGTCAACGCTGCTCTTCTGAGCCGCTGTGAGTGATT
GTTCTTGAGAAGCTTCCAGTAGAGGCAATGGTACTATTTAATGCGAGCGATCAACTCCCTGGGAATCC
ACGTCCTAGACTCTAGCCGTCCCACTGACCCTCTGAGCCACAGCAGCAACAGCAGCTCAGAGCCGCCAT
GTTATAGAGGATAAAGCAGTAGACACCCTGGCTTACCTCAGTGACGGTGACGCCGAGCTGGGTGAAC
GGCTCAGCTGGCGGTGCTGGCTAGGTTAAGCTCTAGGAAGATGTTCTGTAAGAAGATGGGCAATCCT
ATTCTCCAGTAGAGTTCTGATCACAGAGAATGACGTGAAGGAGGGCCTACAGCGATCCACATTTTATA
TGACCGGGCAGGTGAGGAGCATTACAATGCATCTCCGCCCTGCACAAGTCCATGCGGGGCTCAGACCAG
AACGCCTCCCTCTACTGGCTGGCTCGCATGCTCGAGGGAGGAGAGGACCCACTCTACGTGGCAGGAGGC
TTGTCAGGTTTGCAGCGAGGACATAGGCTGCGCAGACCCGTCTGCGTTAACACAAGCGTTGCTGCCTA
CCAAGGCTGTCATTTTATAGGCATGCCTGAATGTGAGGTGCTTCTGGCCAGTGTGTGGTCTACTTTGCC
AGAGCCCCAAAGTCCATTGAGGTGTACAGCGCCTACAACAACGTCAAAGCCTGCCTGAGGAACCACCAGG
GGCCACTGCCCCCGTGCCCTGCACCTGAGGAACGCGCCCACTAGGCTGATGAAGGATTTGGGCTATGG
CAAAGGCTACAAGTACAACCCCATGTACAGCGAGCCTGTGGATCAGGAGTACCTGCTGAAGAGTTGAGG
GGGTAGATTTCTCAAGCAGAGGAGGTGCTGA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_130395 unedited

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GTTACATTTGTATACGACTCCTATAGGGCGGCCGGAATTCGCACGAGGGACGACCCGG
GGCACTGGGACGCGGACGCTGCCGAAGCCGCCACCGCTTCGGGGCCAGCGCGGGGGCC
GCCCGCACCCCGGGCGCTGGCTGCCGAGGAGATCCGACAGATGCTACAGGGCAAGCCGC
TGGCCGACACGATGCGTCTGACACGCTGCAGGATTAATTCGGGCAGAGCAAGGCCGTGG
GCCAGGATACCCTGCTGCGCTCGCTCCTGGAGACCAACGAAATCCCCTCGCTTATCCTGT
GGGGGCCCGGGGCTGCGCAAGACCACTCTGGCTCACATCATAGCCAGCAACAGCAAGA
AACATAGCATAAGGTTTGTGACATTATCTGCAACAAATGCCAAGACAAATGATGTGCGAG
ATGTCATAAAACAAGCTCAAAATGAAAAGAGCTTTTCAAAGGAAAACCATCCTTTTAA
TTGATGAGATTCATCGTTCAATAAATCTCAGCAGGACACTTTCCTTCTCACGTGGAAT
GTGGGACGATCACTCTGATTGGGGCAACCACTGAAAACCTTCTTCCAGGTCAACGCTG
CTTTCTGAGCCGCTGTGAGTATTGTTCTTGAGAAGCTTCCAGTAGAGGCAATGGTGA
CTATNNTAATGCGAGCGATCAACTCCCTGGGAATCCACGTCCTAGACTCTAGCCGTCCTCA
CTGACCTCTGAGCCACAGCAGCAACAGCAGCTCAGAGCCGCCATGGTCATAGAGGATA
AAGCAGTAGACACCCTGGCTTACCTCAGTGACGGTGACGCCGAGCTGGGTTGAACGGAC
TGCAGTGGGCGTGTGGCTANGTTAAGCTCTNAGAAAGATGTTCTGTAGAAGAGTGGGG
CATCCTATT
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_130395 unedited TTTGGCCGCGCCGCAATCTAGNGTCGAGTTTTTTTTTTTTTTTTTTTACTTTGAAATAGT TTTATTGGCTCGTAAGACCTTTGCATATAAAAAATACCCAAAACACTATGCAGTATTAA ATCACAATTACATTTTTTTACCAATTAATACTACCCAGAATATACATTTTTTAAAGAAAA GAAATCCTACAGAACTGAATTCGAAATGACATTATGACTTAAATACTATGACAAAATA GATAATTCCTTATAACATTAATTCATTGCACAAAGCTGCCAGGTATTTTCATAAGCATAA CCGCTGCACCCGAGTCAAATGAACACAATTTCAAAGTTACACATTTATTGAAAGAACTG CGCTCCACCTATGGAACCTTAAATTTCTGGCACAAAATGTTGGTCTGTTCTAACTTCC ACCAGGCAACCAACTTTGCAATCCAATACTTTCTTTCTGGCCCTCCCTAAAAAGCAA CATCCTCTGCTGCTGCGCCCTGAGGAGTCAGCACCTCCTCTGCTTGAAGAAATCTACCC CCCTCAACTCTTCAGGCAGGTACTCCTGATCCACAGGCTCGTGTACATGGGGTTGACT TGTAGCCTTTGCCATAGCCAAATCCTTCATCAGCCTAGTGGGCGGTTCTCAGGTGCA GGGGCACGGGGGCGAGTGGCCCTGGTGGTTNCTCAGGCAGGCTTTGACGTTGTTGTAGG CGCTGGACTCAATGGGACTTGGGGCTCTGGCAAGTANACCACCCTGGGCCGNAAGCA CTNACATTCAGCATGCTATAAATGACGCCTGGNTAGCAGCACCGCTTGTGTAACGCANAA GGTCTGGCAGACTTATGTCTGCTTGCAAACTGACAGNCTNCGGGCAAGTAAAGTGTCTTCT TTCT
Restriction Sites:	NotI-NotI
ACCN:	NM_130395
Insert Size:	2250 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:	<u>NM_130395.1</u> , <u>NP_569079.1</u>
RefSeq Size:	2592 bp
RefSeq ORF:	1923 bp
Locus ID:	56897
UniProt ID:	<u>Q96S55</u>
Cytogenetics:	6p25.2
Domains:	AAA, AAA, ZnF_Rad18

Gene Summary:

Werner's syndrome is a rare autosomal recessive disorder characterized by accelerated aging that is caused by defects in the Werner syndrome ATP-dependent helicase gene (WRN). The protein encoded by this gene interacts with the exonuclease-containing N-terminal portion of the Werner protein. This protein has a ubiquitin-binding zinc-finger domain in the N-terminus, an ATPase domain, and two leucine zipper motifs in the C-terminus. It has sequence similarity to replication factor C family proteins and is conserved from *E. coli* to human. This protein likely accumulates at sites of DNA damage by interacting with polyubiquitinated proteins and also binds to DNA polymerase delta and increases the initiation frequency of DNA polymerase delta-mediated DNA synthesis. This protein also interacts with nucleoporins at nuclear pore complexes. Two transcript variants encoding different isoforms have been isolated for this gene. [provided by RefSeq, Jul 2012]

Transcript Variant: This variant (2) utilizes a different acceptor splice site for an internal coding exon, compared to transcript variant 1. This variant maintains the same reading frame but encodes an isoform (2) which is 25 aa shorter than isoform 1.