

Product datasheet for **RG223970**

USP53 (NM_019050) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	USP53
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG223970 representing NM_019050
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCATGGGTAAAATTCTTACGGAACCTGGTGGCAATCTTGAAAAGTTTATCAGCCTGGAAGTATGC
TATCACTAGCCCCCTACCAAAGGCTTGTTAAATGAACCAGGACAAAACAGCTGCTTTCTTAATAGCGCTGT
ACAGGTTTTATGGCAATTGGATATATTCGACGAAGCTTGC GGTTTTGACTGGACATGTTTGTCAAGGA
GATGCCTGTATATTTGTGCATTGAAGACGATATTGACAGTTCCAACACAGTCGAGAAAAAGCACTTC
CCTCAGATAACATAAGGCATGCTCTTGCAGAAAGTTTCAAAGATGAGCAGCGATTTCACCTTGGCCTTAT
GGATGATGCTGCGGAGTGCTTTGAAAAATATGTTGGAGAGGATTTCATTTTACATAGTGCCAAAGCAGAGAT
GCAGACATGTGTACCTCTAAATCTTGATCACTCACCAGAAGTTTGCTATGACTCTGTATGAACAGTGTG
TGTGTCGTAGCTGTGGAGCATCGTCAGATCCTCTACCTTTTACAGAATTTGTGCGGTACATTTCTACAAC
AGCCTTATGCAATGAGGTTGAAAGAATGTTGGAAGGCATGAACGCTTTAAACCTGAAATGTTTGCAGAA
TTGCTACAAGCAGCAAAATACAACAGATGACTATAGGAAATGTCCTAGTAACTGTGGCCAAAAAATAAAAA
TTCGCCGTGTTTTAATGAATTGCCAGAGATTGTTACAATTTGGTTTGTAGTCTGGGACTCCGAGCATTCTGA
CTTGACCGAAGCTGTTGTTGCGAATCTAGCAACACATCTTTATCTTCTGGGCTTTTTTATAGAGTTACT
GATGAAAATGCCAAAAATAGTGAACCTTAACTTGGTATGATCTGCTACACCAGCCAACATTATTGTG
CCTTTGCATTTACACCAAAAGTTTCCAAATGGGTATTTTTTGTATGATGCAAAATGTGAAAGAGATTGGAAC
TAGATGGAAGATGTTGTCTCCAAATGCATTGATGCCACTTTAGCCCACTACTTTTGTGTTTATGCAAAAC
CCAGATGGCACAGCAGTTTCTACTGAGGATGCACTCAGGCAGGTGATCAGCTGGTACATTACAATCTG
TTGCAGAAAATATGGGATGTGAAAAGCCTGTAATTCATAAGTCAGATAATTTAAAGAAAAATGGATTGG
TGATCAGGCAAGCAGAGAGAAAAATCAGAAATTTCCAACTGATAATTTTCATCATCTAATCGGAGCCAC
AGTCACACAGGTGTAGGAAAGGACCAGCTAAGTTAAGTCACATTGATCAAAGGGAAGATGAAAGACA
TTTCCAGAGAATGTGCTCTGAAAGCTATTGAACAGAAAACTTACTTTCTTACAAAGGAAGATTTAGA
GAAGGGACAAAGAAAGATTTAGGACGACATAGAGATTTGGTTGATGAAGACCTTTTACATTTCCAATCT
GGATCACCTCTGCCCCAAATGGTTTTAAACAACATGGGAATCCACATCTATATCATAGTCAAGGAAAAAG
GATCATATAAACATGACCGAGTTGTACCTCAGAGTCGAGCTTCTGCACAAATAATAAGTTCAAGTAAATC
CCAGATTCTTGCTCCAGGAGAGAAAAATACTGGCAAAGTTAAGAGTGACAATGGCACTGGATATGACACA
GACAGCAGCCAAGATTCTAGGGATAGAGGAACAGCTGTGATAGCAGCAGTAAAGCCGGAACCGAGGTT
GGAAACCTATGAGAGAAACATTAAATGTTGATAGTATTTTTAGTGAAGTGAAAAAGACAGCATAGTCC
AAGACATAAACCAATATCAGTAATAAGCCTAAATCTAGCAAGGATCCGAGTTTTAGTAATTGGCCAAAA
GAGAATCCAAAGCAAAAGGTTTTAATGACCATATATGAAGATGAAATGAAGCAGGAAATAGGAAGCAGAA
GTTCCCTTGAATCTAATGGAAGGAGCAGAGAAAAATAAGGCCCTTGTAGAGGGTAAAGTGCATGGTGA
TAATTGGCAGATGCAAAAGGACTGAGTCTGGATATGAAAGCAGTGATCACATCAGTAATGGTTCTACTAAT
TTGGACTCACCTGTTATCGATGGAATGGTACAGTAATGGATATCAGTGGTGTAAAGAAACAGTATGCT
TCAGTGACCAGATTACGACAAGCAACCTAAATAAAGAACGTGGGACTGTACCTCCCTTTCAGAGCCAACA
TCACTTAGAAGGCTTTAGAAAAGAACTCAGGAATTTGGAAGCAGGCTATAAATCTCATGAATTCACCCA
GAATCAGATTTACAAATAAAAAATCATTTGATAAAAAGATCACATGTACATGAAGACAATGGAAAGTTAT
TTCTTTCATCCAGTCTACAAATACCAAGGACCATAATGCAAGAGAACATATCCACCAGTCAGATGAACA
GAAACTTGAAAAACCGAATGAATGCAAAATTTCTGAGTGGCTTAATATAGAAAATCTGAGAGAACAGGT
TTGCCTTTTACGTTGATAACTCTGCTTCTGGGAAGAGAGTGAACAGTAATGAACCATCTTCATTATGGT
CTTACACCTTAAGAACTGTTGGGTTAAAGCCAGAACTGCTCCTCTCATCCAGCAACAAAAATCATGGA
TCAATGTTACTTTGAGAACTCTCTATCCACAGAATGTATAATTGCGTCAGCCAGCAGATCTGATGGGTGT
CAGATGCCAAACTTTTTTGCAGAACTTACCACCCCTTTGCCACCAAGAAATATGCTATAACCAAGTG
TGCCACAGTCAGAGAAAAGCGAATCTACACCTGATGTCAAATACAGAGGTGTTAAAGCTACCTCTCA
TCTTCCGAAGCACAGTTTAAGTACAGCTTCAGAACCAAGTTTAGAAGTGAGTACACATATGAATGATGAA
AGACATAAAGAAACATTTCAAGTGAGAGAATGTTTTGGCAACACACCAAACTGTCCATCCAGCTCCTCAA
CTAACGATTTTTCAGGCAAACTCAGGTGCCATTGATGCATTTTGCCAACCAAGAACTAGACTCTATTCTAC
CTGTCCAAATGAGACAGTTTCATTAACCTATTTTTCAGTTGATAGCTGCATGACGGATACATATAGA
TTGAAATACCATCAGAGGCCCAAGCTCTCTTTTCCAGAGAGCAGTGGCTTTTGAATAATTCATCTATCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG223970 representing NM_019050

Red=Cloning site Green=Tags(s)

MAWVKFLRPKPGNLGKVVQPGSMLSLAPTKGLLNEPGQNSCFLNSAVQVLWQLDIFRRSLRVLTGHVCQG
DACIFCALKTIFAQFQHSREKALPSDNIRHALAESFKDEQRFQLGLMDAAECFENMLERIHFIHIVPSRD
ADMCTSKSCITHQKFAMTLYEQVCVRSCGASSDPLPFTFVRYISTTALCNEVERMLERHERFKPEMFAE
LLQAANTDDYRKCPSCGQKIKIRRVLMNCPEIVTIGLVWDSEHSDLTEAVVRNLATHLYLPGLFYRV
DENAKNSELNLVGMICYTSQHYCAFAFHTKSSKWVFFDDANVKEIGTRWKDVVSKCIRCHFQPLLLFYAN
PDGTAVSTEDALRQVISWSHYKSVAENMGCEKPIVHKSDNLKENGFGDQAKQRENQKFPTDNISSSNRSH
SHTGVGKGPAPKLSHIDQREKIKDISRECALKAEQKNLLSSQRKDEKQGRKDLGRHRDLVDEDLSHFQS
GSPPAPNGFKQHGNPHLYHSQKGKSYKHDRVVPQSRASAISSSSKQILAPGEKITGKVKSDNGTGYDT
DSSQDSRDRGNSCDSKSRNRGWKPMRETLNVDSIFSESEKRQHSRHPKPNISNPKSSKDPFSFNWPK
ENPKQKGLMTIYEDEMKEIGSRSSLESNGKGAENKGLVEGKVHGDNWQMQRTESGYESSDHISNGSTN
LDSPVIDGNGTVMDSGVKETVCFSDQITTSNLNKERGDCTSLQSQHLEGFRKELRNLEAGYKSHEFHP
ESHLQIKNHLIKRSHVEDNGKLPSSSLQIPKDHNAHEIHQSDEQKLEKPNCKFSEWLNIENTERTG
LPFHVDNSASGKRVNSNEPSSLWSSHLRTVGLKPETAPLIQQQINMDQCYFENSLSTECIIRSASRSDGC
QMPKLCQNLPPPLPPKYYAITSVPQSEKSESTPDVKLTEVFKATSHLPKHSLSTASEPSLEVSTHMDNDE
RHKETQVRECFGNTPNCPSSSSTNDFQANSGAIDAFQPELDSISTCPNETVSLTTYFVSDSCMTDTYR
LKYHQRPKLSFPSSSGFCNNLSL

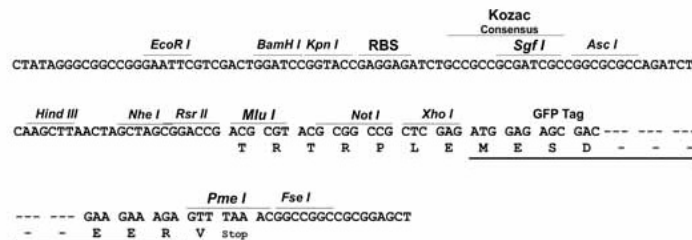
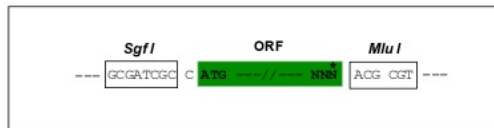
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN:

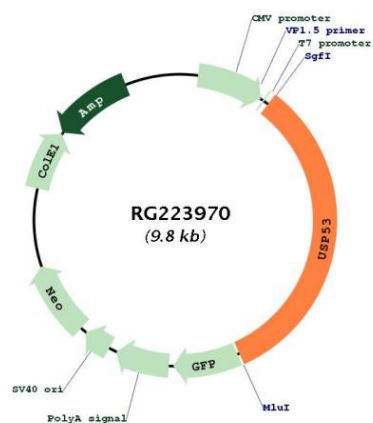
NM_019050

ORF Size:

3219 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_019050.2 , NP_061923.2
RefSeq Size:	6612 bp
RefSeq ORF:	3222 bp
Locus ID:	54532
UniProt ID:	Q70EK8
Cytogenetics:	4q26
Gene Summary:	Tight junction-associated protein that is involved in the survival of auditory hair cells and hearing. Maybe by modulating the barrier properties and mechanical stability of tight junctions (By similarity). Has no peptidase activity (PubMed:14715245).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG223970