

Product datasheet for **RG225604**

p53 (TP53) (NM_001126112) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p53 (TP53) (NM_001126112) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	p53
Synonyms:	BCC7; BMFS5; LFS1; P53; TRP53
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG225604 representing NM_001126112 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGAGCCGAGTCAGATCCTAGCGTCGAGCCCCCTCTGAGTCAGGAAACATTTTCAGACCTATGGA
AACTACTTCTGAAAACAACGTTCTGTCCCCCTTGCCGTCCTCAAGCAATGGATGATTTGATGCTGTCCCC
GGACGATATTGAACAATGGTTCAGTGAAGACCCAGGTCCAGATGAAGCTCCAGAATGCCAGAGGCTGCT
CCCCCGTGGCCCTGCACCAGCAGCTCCTACCCGGCGGCCCTGCACCAGCCCCCTCTGGCCCTGT
CATCTTCTGTCCCTTCCAGAAAACCTACCAGGGCAGCTACGGTTTCCGCTCTGGGCTTCTTGCAATCTGG
GACAGCCAAGTCTGTGACTTGCACGTAATCCCTGCCCTCAACAAGATGTTTTGCCAACTGGCCAAGACC
TGCCCTGTGCAGCTGTGGGTTGATTCCACACCCCCGCGCCGACCCGCGTCCGCGCCATGGCCATCTACA
AGCAGTCACAGCAGATGACGGAGGTTGTGAGGCGCTGCCCCACCATGAGCGCTGCTCAGATAGCGATGG
TCTGGCCCTCCTCAGCATCTTATCCGAGTGGAAGGAAATTTGCGTGTGGAGTATTTGGATGACAGAAA
ACTTTTCGACATAGTGTGGTGGTGCCTATGAGCCGCTGAGGTTGGCTCTGACTGTACCACCATCCACT
ACAACATACATGTGAACAGTTCCTGCATGGGCGGCATGAACCGGAGGCCATCCTCACCATCATCACACT
GGAAGACTCCAGTGTAATCTACTGGGACGGAACAGCTTTGAGGTGCGTGTGTTGTGCCTGTCCCTGGGAGA
GACCGGCGCACAGAGGAAGAGAATCTCCGCAAGAAAGGGGAGCCTCACCAGAGCTGCCCCAGGGAGCA
CTAAGCGAGCACTGCCCAACAACACAGCTCCTCTCCCCAGCCAAAGAAGAAACCATGGATGGAGAATA
TTTCACCTTCAGATCCGTGGGCGTGAGCGCTTCGAGATGTTCCGAGAGCTGAATGAGGCCTTGGAACTC
AAGGATGCCAGGCTGGGAAGGAGCCAGGGGGAGCAGGGCTCACTCCAGCCACCTGAAGTCCAAAAAGG
GTCAGTCTACCTCCGCCATAAAAACTCATGTTCAAGACAGAAGGGCCTGACTCAGAC

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG225604 representing NM_001126112
Red=Cloning site Green=Tags(s)

MEEPQSDPSVEPPLSQETFSDLWKLLPENNVLSPPLSQAMDDLMLSPDDIEQWFTEDPGPDEAPRMPEAA
 PPVAPAPAAPTPAAPAPAPSWPLSSSVPSQKTYQGSYGFRLGFLHSGTAKSVTCTYSPALNKMFCQLAKT
 CPVQLWVDSTPPPGRVTRAMAIYKQSQHMTEVVRRCPPHHERCSDSDGLAPPQHLIRVEGNLRVEYLDDRN
 TFRHSVVVPYEPPEVGSDCCTTIHYNMCMSSCMGGMNRRPILTIITLEDSSGNLLGRNSFEVRCACPGR
 DRRTEENLRKKGEPHHELPPGSTKRALPNNTSSSPQPKKKPLDGEYFTLQIRGRERFEMFRELNEALEL
 KDAQAGKEPGGSRAHSSHLKSKKGQSTSRHKKLMFKTEGPDS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001126112

ORF Size: 1179 bp

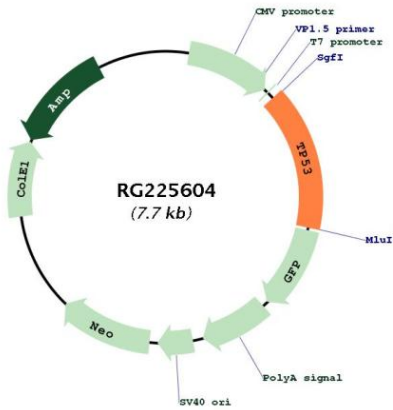
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<u>NM_001126112.2</u>
RefSeq Size:	2583 bp
RefSeq ORF:	1182 bp
Locus ID:	7157
UniProt ID:	<u>P04637</u>
Cytogenetics:	17p13.1
Protein Families:	Druggable Genome, Stem cell - Pluripotency, Transcription Factors
Protein Pathways:	Amyotrophic lateral sclerosis (ALS), Apoptosis, Basal cell carcinoma, Bladder cancer, Cell cycle, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, Glioma, Huntington's disease, MAPK signaling pathway, Melanoma, Neurotrophin signaling pathway, Non-small cell lung cancer, p53 signaling pathway, Pancreatic cancer, Pathways in cancer, Prostate cancer, Small cell lung cancer, Thyroid cancer, Wnt signaling pathway
Gene Summary:	This gene encodes a tumor suppressor protein containing transcriptional activation, DNA binding, and oligomerization domains. The encoded protein responds to diverse cellular stresses to regulate expression of target genes, thereby inducing cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. Mutations in this gene are associated with a variety of human cancers, including hereditary cancers such as Li-Fraumeni syndrome. Alternative splicing of this gene and the use of alternate promoters result in multiple transcript variants and isoforms. Additional isoforms have also been shown to result from the use of alternate translation initiation codons from identical transcript variants (PMIDs: 12032546, 20937277). [provided by RefSeq, Dec 2016]

Product images:



Circular map for RG225604