

Product datasheet for **RG200003**

p53 (TP53) (NM_000546) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p53 (TP53) (NM_000546) 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:	>RG200003 representing NM_000546. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTGAACCGTCAGAATTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAGGAGCCGAGTCAGATCCTAGCGTCGAGCCCCCTCTGAGTCAGGAAACATTTTCAGACCTATGG
AAACTACTTCTGAAAACAACGTTCTGTCCCCCTTGCCGTCCTCAAGCAATGGATGATTTGATGCTGTCC
CCGGACGATATTGAACAATGGTTCAGTGAAGACCCAGGTCAGATGAAGCTCCAGAATGCCAGAGGCT
GCTCCCCCGTGGCCCCGCACCAGCAGCTCTACACCGCGGCCCTGCACCAGCCCCCTCTGGCCC
CTGTCATCTTCTGTCCCTTCCAGAAAACCTACCAGGGCAGCTACGGTTCCGTCCTGGGCTTCTTGCA
TCTGGGACAGCCAAGTCTGTGACTTGCAGTACTCCCCTGCCCTCAACAAGATGTTTTGCCAACTGGCC
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AGCGATGGTCTGGCCCCCTCTCAGCATCTTATCCGAGTGGAAAGAAATTTGCGTGTGGAGTATTTGGAT
GACAGAAACACTTTTCGACATAGTGTGGTGGTGCCTATGAGCCGCTGAGGTTGGCTCTGACTGTACC
ACCATCCACTACAACATACATGTGAACAGTTCCTGCATGGGCGGCATGAACCGGAGGCCATCCTCACC
ATCATCAGTGGAAAGACTCCAGTGGTAACTACTGGGACGGAACAGCTTTGAGGTGCGTGTGGTGGCC
TGTGCTGGGAGAGACCGCGCACAGAGGAAGAGAATCTCCGCAAGAAAGGGGAGCCTCACCACGAGCTG
CCCCAGGGAGCACTAAGCGAGCACTGCCAACACACCAGCTCCTCTCCCAGCAAAGAAGAAACCA
CTGGATGGAGAATATTTACCCTTCAGATCCGTGGGCGTGAGCGTTCGAGATGTTCCGAGAGCTGAAT
GAGGCTTGGAACTCAAGGATGCCAGGCTGGGAAGGAGCCAGGGGGAGCAGGGCTCACTCCAGCCAC
CTGAAGTCCAAAAGGGTCACTACTCCCGCCATAAAAACTCATGTTCAAGACAGAAGGCTGAC
TCAGAC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG200003
 Blue=ORF Red=Cloning site Green=Tag(s)

MEEPQSDPSVEPPLSQETFSDLWKLLPENNVLSPLPSQAMDDLMLSPDDIEQWFTEDPGPDEAPRMPEA
 APRVAPAAPAPAPAPAPAPSWPLSSSVPSQKTYQGSYGFRLGFLHSGTAKSVTCTYSPALNKMFCQLA
 KTCPVQLWVDSTPPPGRVTRAMAIYKQSQHMTVEVRRCPHHERCSDSDGLAPPQHLIRVEGNLRVEYLD
 DRNTRFRHSVVVPYEPPEVGSDCCTIIHYNMCMSSCMGGMNRRPILTIITLEDSSGNLLGRNSFEVRVCA
 CAGRDRRTEENLRKKGEPHHELPPGSTRKALPNNTSSSPQPKKKPLDGEYFTLQIRGRERFEMFRELN
 EALELKDAQAGKEPGGSSRAHSSHLKSKKGQSTRHKKLMFKTEGPDSD
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSTMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000546

ORF Size: 1173 bp

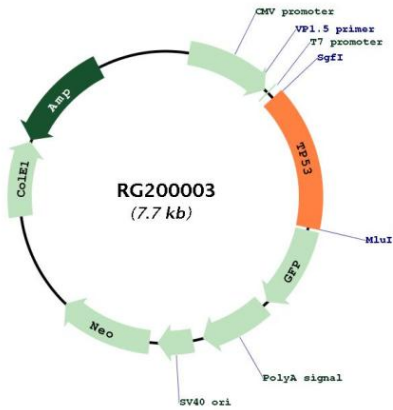
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq Size:	2629 bp
RefSeq ORF:	1182 bp
Locus ID:	7157
UniProt ID:	P04637
Cytogenetics:	17p13.1
Domains:	P53
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
MW:	43.7 kDa
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 RG200003