

Product datasheet for **RG232444**

p53 (TP53) (NM_001276695) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: p53 (TP53) (NM_001276695) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: TP53
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: >RG232444 representing NM_001276695
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATGATTTGATGCTGTCCCCGGACGATATTGAACAATGGTTCACTGAAGACCCAGGTCCAGATGAAG
CTCCCAGAATGCCAGAGGCTGCTCCCCCGTGGCCCTGCACCAGCAGCTCCTACACCGCGGCCCTGC
ACCAGCCCCCTCTGGCCCTGTCATCTTCTGTCCCTCCAGAAAACCTACCAGGGCAGCTACGGTTTC
CGTCTGGGCTTCTGCATTCTGGGACAGCCAAGTCTGTGACTTGACGTAATCCCTGCCCTCAACAAGA
TGTTTTGCCAACTGGCCAAGACCTGCCCTGTGCAGCTGTGGTTGATTCCACACCCCGCCCGCACCCG
CGTCCGCGCCATGGCCATCTACAAGCAGTCACAGCACATGACGGAGGTTGTGAGGCGCTGCCCCACCAT
GAGCGCTGCTCAGATAGCGATGGTCTGGCCCTCCTCAGCATCTTATCCGAGTGGAGGAAATTTGCGTG
TGGAGTATTTGGATGACAGAAACTTTTCGACATAGTGTGGTGGTGCCTATGAGCCGCTGAGGTTGG
CTCTGACTGTACCACCATCCACTACAACACTACATGTGTAACAGTTCCTGCATGGGCGGCAATGAACCGGAGG
CCCATCCTCACCATCATCACACTGGAAGACTCCAGTGGTAATCTACTGGGACGGAACAGCTTTGAGGTGC
GTGTTTGTGCTGTCTGGGAGAGACCGGCGCACAGAGGAAGAGAATCTCCGCAAGAAAGGGGAGCCTCA
CCACGAGCTGCCCCAGGGAGCACTAAGCGAGCACTGCCAACAAACACAGCTCCTCTCCCAGCCAAAG
AAGAAACCACTGGATGGAGAATATTTACCCTTCAGATGCTACTTGACTTACGATGGTGTACTTCTCTGA
TAAACTCGTCG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG232444 representing NM_001276695
 Red=Cloning site Green=Tags(s)

MDDLMLSPDDIEQWFTEDPGPDEAPRMPEAAPPVAPAPAAPTPAAPAPAPSWPLSSSVPSQKTYQGSYGF
 RLGFLHSGTAKSVTCTYSPALNKMFCQLAKTQVQLWVDSTPPPGRVVRAMAIYKQSQHMTEVVRRCPHH
 ERCSDSDGLAPPQHLIRVEGNLRVEYLDLDRNTRFRHSVVVPYEPPEVGSDCCTIIHYNMCMNSSCMGGMNRR
 PILTIITLEDSSGNLLGRNSFEVRCACACPRDRRTEENLRKKGEPHHELPPGSTKRALPNNTSSSPQPK
 KKPLDGEYFTLQMLLDLRWCYFLINSS

TRTRPLE - GFP Tag - V

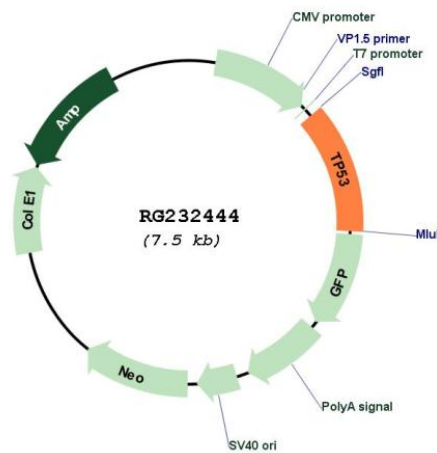
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001276695

ORF Size: 921 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.
RefSeq:	NM_001276695.2
RefSeq Size:	2651 bp
RefSeq ORF:	924 bp
Locus ID:	7157
UniProt ID:	P04637
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]