

## Product datasheet for **RG236396**

### p53 (TP53) (NM\_001276699) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** p53 (TP53) (NM\_001276699) 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:** >RG236396 representing NM\_001276699.  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGGCCATCTACAAGCAGTCACAGCACATGACGGAGGTTGTGAGGCGCTGCCCCACCATGAGCGCTGC
TCAGATAGCGATGGTCTGGCCCCCTCAGCATCTTATCCGAGTGAAGGAAATTTGCGTGTGGAGTAT
TTGGATGACAGAAACACTTTTCGACATAGTGTGGTGGTGCCTATGAGCCGCCTGAGGTTGGCTCTGAC
TGTACCACCATCCACTACAACATACATGTGAACAGTTCCTGCATGGGCGGCATGAACCGGAGGCCATC
CTCACCATCATCACTGGAAGACTCCAGTGGTAATCTACTGGGACGGAACAGCTTTGAGGTGCGTGT
TGTGCCTGTCCTGGGAGAGACCGCGCACAGAGGAAGAGAATCTCCGAAGAAAGGGGAGCCTACCAC
GAGCTGCCCCAGGGAGCACTAAGCGAGCACTGCCAACAAACACCAGCTCCTCTCCCAGCAAAGAAG
AAACCACTGGATGGAGAATATTTACCCTTCAGATGCTACTTGACTTACGATGGTGTACTTCTGATA
AACTCGTCG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```

**Protein Sequence:** >Peptide sequence encoded by RG236396  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MAIYKQSQHMTEVVRRCPPHERCSDSGLAPPQHLIRVEGNLRVEYLDDRNTFRHSVVVPYEPPEVGS
CTTIHYNMNCSSCMGMNRRPILTIITLEDSSGNLLGRNSFEVRCACPRDRRTEENLRKKGEPPH
ELPPGSTKRALPNNTSSSPQPKKPLDGEYFTLQMLLDLRWCYFLINSS
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLSRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

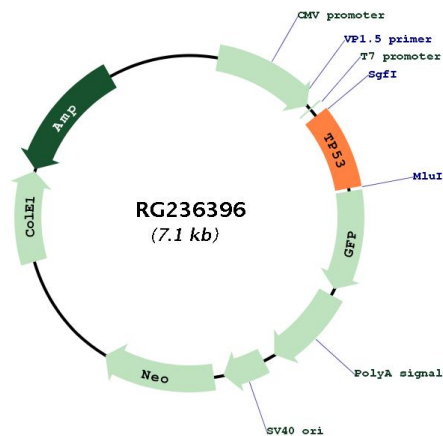
**Restriction Sites:** SgfI-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM\_001276699

ORF Size: 561 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).

RefSeq:	<a href="#">NM_001276699.2</a>
RefSeq Size:	2331 bp
RefSeq ORF:	564 bp
Locus ID:	7157
UniProt ID:	<a href="#">P04637</a>
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
MW:	21.9 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]