

Product datasheet for **RG236781**

p53 (TP53) (NM_001276697) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p53 (TP53) (NM_001276697) 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:	>RG236781 representing NM_001276697. Blue =ORF Red =Cloning site Green =Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCCATCTACAAGCAGTCACAGCACATGACGGAGGTTGTGAGGCGCTGCCCCACCATGAGCGCTGC
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TTGGATGACAGAAACACTTTTCGACATAGTGTGGTGGTGCCTATGAGCCGCCTGAGGTTGGCTCTGAC
TGTACCACCATCCACTACAACATACATGTGTAACAGTTCCTGCATGGGCGGCATGAACCGGAGGCCATC
CTCACCATCATCACTGGAAGACTCCAGTGGTAATCTACTGGGACGGAACAGCTTTGAGGTGCGTGT
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GAGCTGCCCCAGGGAGCACTAAGCGAGCACTGCCAACAACACCAGCTCCTCTCCCAGCAAAGAAG
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CTGAATGAGGCCTTGAACTCAAGGATGCCAGGCTGGGAAGGAGCCAGGGGGGAGCAGGGCTCACTCC
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CCTGACTCAGAC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
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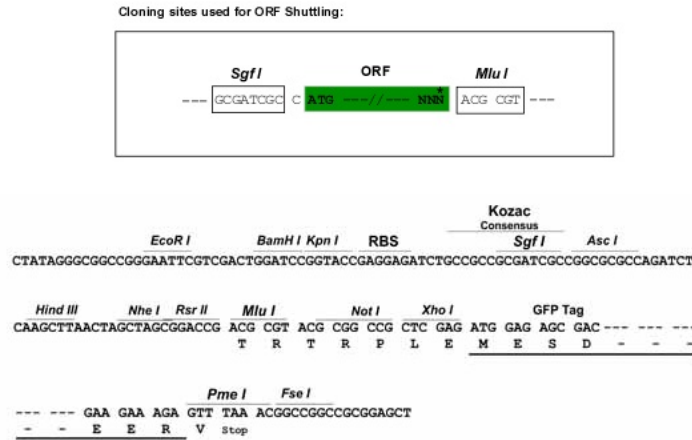
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Protein Sequence: >Peptide sequence encoded by RG236781
 Blue=ORF Red=Cloning site Green=Tag(s)

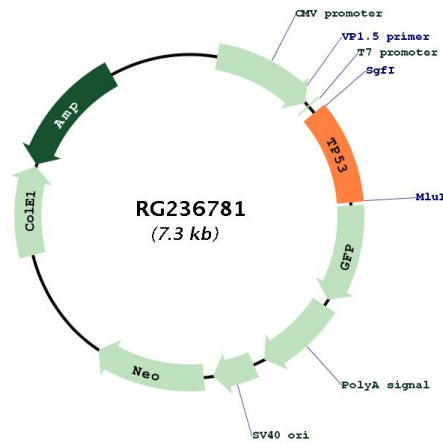
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 ELPPGSKRALPNNTSSSPQPKKPLDGEYFTLQIRGRERFEMFRELNEALELKDAQAGKEPGGSSRAHS
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 MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNAVHFLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001276697

ORF Size:	702 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:	NM_001276697.2
RefSeq Size:	2271 bp
RefSeq ORF:	705 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
MW:	27 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]