

Product datasheet for RC232563

p53 (TP53) (NM_001276760) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p53 (TP53) (NM_001276760) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TP53
Synonyms:	BCC7; BMFS5; LFS1; P53; TRP53
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC232563 representing NM_001276760 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATGATTTGATGCTGTCCCGGACGATATTGAACAATGGTTCACTGAAGACCCAGGTCCAGATGAAG
CTCCCAGAATGCCAGAGGCTGCTCCCCCGTGGCCCTGCACCAGCAGCTCTACACCGCGGCCCTGC
ACCAGCCCCCTCTGGCCCTGTCATCTTCTGTCCCTCCAGAAAACCTACCAGGGCAGCTACGGTTTC
CGTCTGGGCTTCTGCATTCTGGGACAGCCAAGTCTGTGACTTGCACGTACTCCCCTGCCCTCAACAAGA
TGTTTTGCCAACTGGCCAAGACCTGCCCTGTGCAGCTGTGGGTTGATTCCACACCCCGCCCGGCACCCG
CGTCCGCGCCATGGCCATCTACAAGCAGTCACAGCACATGACGGAGGTTGTGAGGCGCTGCCCCACCAT
GAGCGCTGCTCAGATAGCGATGGTCTGGCCCTCCTCAGCATCTTATCCGAGTGGAAAGAAATTTGCGTG
TGGAGTATTTGGATGACAGAAACACTTTTCGACATAGTGTGGTGGTGCCTATGAGCCGCTGAGGTTGG
CTCTGACTGTACCACCATCCACTACAACATATGTGTAACAGTTCCTGCATGGGCGGCAATGAACCGGAGG
CCCATCCTCACCATCATCACACTGGAAGACTCCAGTGGTAATCTACTGGGACGGAACAGCTTTGAGGTGC
GTGTTTGTGCTGTCCTGGGAGAGACCGGCGCACAGAGGAAGAGAATCTCCGCAAGAAAGGGGAGCCTCA
CCACGAGCTGCCCCAGGGAGCACTAAGCGAGCACTGCCAACAAACACCAGCTCCTCTCCCAGCCAAAG
AAGAAACCACTGGATGGAGAATATTTACCCTTCAGATCCGTGGGCGTGAGCGCTTCGAGATGTTCCGAG
AGCTGAATGAGGCTTGGAACTCAAGGATGCCAGGCTGGGAAGGAGCCAGGGGGAGCAGGGCTCACTC
CAGCCACCTGAAGTCCAAAAAGGGTCAGTCTACCTCCCGCCATAAAAACTCATGTTCAAGACAGAAAGG
CCTGACTCAGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC232563 representing NM_001276760
 Red=Cloning site Green=Tags(s)

MDDLMLSPDDIEQWFTEDPGPDEAPRMPEAAPPVAPAPAAPTPAAPAPAPSWPLSSSVPSQKTYQGSYGF
 RLGFLHSGTAKSVTCTYSPALNKMFCQLAKTCPVQLWVDSTPPPGRVVRAMAIYKQSQHMTEVVRCPHH
 ERCSDSDGLAPPQHLIRVEGNL RVEYLLDRNTRFRHSVVVPYEPPEVGSDC TTIHNYMNCNSSCMGGMNRR
 PILTIITLEDSSGNLLGRNSFEVRCACPGRRDRTEENLRKKGEPHHELPPGSKRALPNNTSSSPQPK
 KKPLDGEYFTLQIRGRERFEMFRELNEALELKDAQAGKEPGGSAHSSHLKSKKGQSTSRHKLMFKTEG
 PSDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Cloning Scheme:

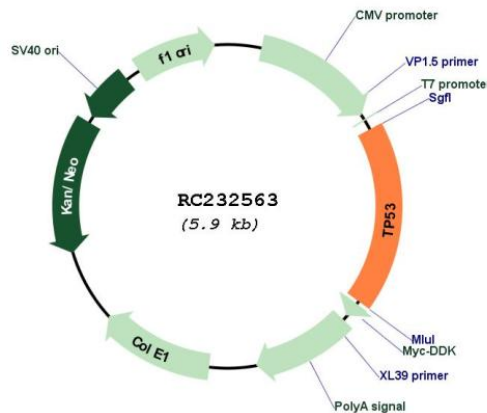
Sgfl-MluI

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



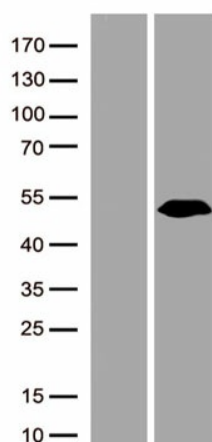
ACCN:

NM_001276760

ORF Size:	1062 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_001276760.2
RefSeq Size:	2591 bp
RefSeq ORF:	1065 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:	39.8 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:

Western blot validation of overexpression lysate using anti-DDK antibody (Cat# [TA180144]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC232563 using transfection reagent PEI.