

# **Product datasheet for RC225343**

## p53 (TP53) (NM 001126115) Human Tagged ORF Clone

### **Product data:**

Vector:

**Product Type:** Expression Plasmids

**Product Name:** p53 (TP53) (NM\_001126115) Human Tagged ORF Clone

pCMV6-Entry (PS100001)

Tag: Myc-DDK
Symbol: TP53

Synonyms: BCC7; BMFS5; LFS1; P53; TRP53

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC225343 representing NM\_001126115
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC225343 representing NM\_001126115

Red=Cloning site Green=Tags(s)

MFCQLAKTCPVQLWVDSTPPPGTRVRAMAIYKQSQHMTEVVRRCPHHERCSDSDGLAPPQHLIRVEGNLR VEYLDDRNTFRHSVVVPYEPPEVGSDCTTIHYNYMCNSSCMGGMNRRPILTIITLEDSSGNLLGRNSFEV RVCACPGRDRRTEEENLRKKGEPHHELPPGSTKRALPNNTSSSPQPKKKPLDGEYFTLQIRGRERFEMFR ELNEALELKDAQAGKEPGGSRAHSSHLKSKKGQSTSRHKKLMFKTEGPDSD

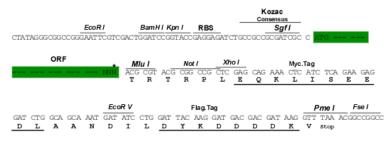
#### TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** 

Sgfl-Mlul

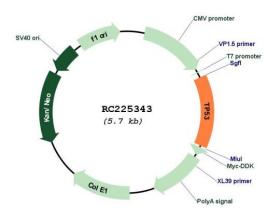
**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

## Plasmid Map:



**ACCN:** NM\_001126115

ORF Size: 783 bp



### p53 (TP53) (NM\_001126115) Human Tagged ORF Clone - RC225343

**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:** 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: <u>NM 001126115.1</u>, <u>NP 001119587.1</u>

17p13.1

 RefSeq Size:
 2271 bp

 RefSeq ORF:
 786 bp

 Locus ID:
 7157

 UniProt ID:
 P04637

Cytogenetics:

**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: 29.6 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]