

# Product datasheet for RC200003L3

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## p53 (TP53) (NM\_000546) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: p53 (TP53) (NM 000546) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: p53

Synonyms: BCC7; BMFS5; LFS1; P53; TRP53

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Sgfl-Mlul

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC200003).

Sequence:

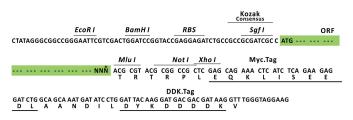
:

Restriction Sites: Cloning Scheme:

Cloning sites used for ORF Shuttling:

Sgf I ORF Mlu I

--- GCG ATC GC ATG --- / --- NNÑ ACG CGT ---



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

**ACCN:** NM\_000546

ORF Size: 1179 bp





### p53 (TP53) (NM\_000546) Human Tagged Lenti ORF Clone - RC200003L3

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 000546.5</u>

 RefSeq Size:
 2591 bp

 RefSeq ORF:
 1182 bp

 Locus ID:
 7157

 UniProt ID:
 P04637

 Cytogenetics:
 17p13.1

**Domains:** P53

**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

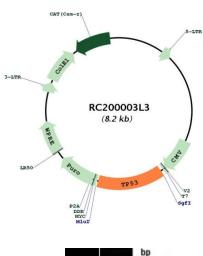
MW: 43.7 kDa



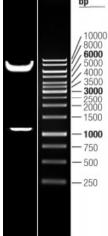
#### **Gene Summary:**

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:**



Circular map for RC200003L3



Double digestion of RC200003L3 using Sgfl and Mlul