

Product datasheet for RC225256L3

OriGene Technologies, Inc.

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p53 (TP53) (NM_001126117) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: p53 (TP53) (NM_001126117) 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)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC225256).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001126117

ORF Size: 642 bp



p53 (TP53) (NM_001126117) Human Tagged Lenti ORF Clone - RC225256L3

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 001126117.1, NP 001119589.1</u>

RefSeq ORF: 645 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: 24.2 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]