Product datasheet for **SC119832**

### p53 (TP53) (NM_000546) Human Untagged Clone

#### Product data:

- **Product Type:** Expression Plasmids
- **Product Name:** p53 (TP53) (NM_000546) Human Untagged Clone
- **Tag:** Tag Free
- **Symbol:** TP53
- **Synonyms:** BCC7; BMFS5; LFS1; P53; TRP53
- **Vector:** pCMV6-XL5
- **E. coli Selection:** Ampicillin (100 µg/mL)
- **Cell Selection:** None

#### Fully Sequenced ORF:

> OriGene ORF sequence for NM_000546 edited

ATGGAGGAGCGCGACGTGATCCTAGGTCAGGCCCTGCTCTGAGCTAGGAACATTTTG
GACCTATGGAAACTACTCTCTTGGAAACTACTTCCTGAAAACAACGTTCTGTCCCCCTG
GACGATATTGATATCTCTTGGAAACTACTTCCTGAAAACAACGTTCTGTCCCCCTG
GACGATATTGATATCTCTTGGAAACTACTTCCTGAAAACAACGTTCTGTCCCCCTG
GACGATATTGATATCTCTTGGAAACTACTTCCTGAAAACAACGTTCTGTCCCCCTG
GACGATATTGATATCTCTTGGAAACTACTTCCTGAAAACAACGTTCTGTCCCCCTG

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This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
**5' Read Nucleotide Sequence:**

```
TTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCTTTGCGTTCGGGC
TGGGAGCGTGCTTTCCACGACGGTGACACGCTTCCCTGGATTGGCAGCCAGACTGCCTTC
CGGGTCACTGCCCTACACCGCGCCGCCCTTCTGACACGGCGCCGCAGTCTGGCCAATT
CTTCCCCACAGAAAACCTACCAAGGGCGACTACGTCCCCGTTTGTTCTGTTGCTTTCT
GGGACGGGCAAAGTCGATGTGAACATGGATGGATGGGATGGGACGACGACGCCGAGAG
CCGCATGACGGAGGTTGTGAGGCGCTGCCCCGACCATGAGCGCTGCTCAGATAGCGAT
GGTCTGCCCCTCCTCAGCATCTTATCCGATGGAAAGAAATTTGGCGTGTGGAGTATTT
GGATGACAGAAAACACTTTTCCACATATGGGNGTGGTCGCCCTAAGAGCCCCCCTGAG
GGTCTGACTGTCCCACCATCCCTTCCATCAGTGCAAACGTTCTTGCCGGGATGAACCG
GAAGGCCCTCCTTACCTCATCACTGGAAGACTCCGGGGAATTCACG
```

**Restriction Sites:** NotI-NotI

**ACCN:** NM_000546

**ORF Size:** 1182 bp

**Insert Size:** 2500

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**3' Read Nucleotide Sequence:**

```
CCGCGGCCGCAATCTAGNATCGAGTTTTTTTTTTTTTTTTTTGTCAGGTAAGATTTAGG
TAAAAATAAGAGATCGATATAAAAAATGGGATATAAAAAGGGAGAAGGAGGGGAAGGGTG
GTGAAAATGCAGATGTGCTTGCAGAATGTAAAAGATGTTGACCCTTCCAGCTGGACGTGG
TGGCTCACAATTGTGATACATGACGAGCTGGAGCTGAGCGAGTCCGGGACGACGCCGAC
CCGCCCATGCCCAAGGGCTGAGCCCATCACACTCTTACTACAAACCATACGAAAA
GTTGCGTGCCCACTGGAGCTGACATGGAGCCTGTCGCCGAGCTGAGAAGCCGAGCA
CTGCTCGAGCGCCGGGAAAGTGCAGAATACCAGCAGCTCCACACTCCAGTCTGAGCA
CTGGCAACCATCAAAGAGAGCAGCTTCACCGTTAGATAGAAGCCCCTTCCACCTCCT
AAAACTTGGGACGCTGCTCTATGGACCTGGCTGGCAGCTCCACCATCCCATCTCACG
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OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Product Components: The cDNA clone is shipped in a 2-D bar-coded Matrix tube as dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials. Every lot of primer is tested to provide clean sequencing of OriGene TrueClones.

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: NM_000546.2, NP_000537.2
RefSeq Size: 2629
RefSeq ORF: 1182
Locus ID: 7157
Cytogenetics: 17p13.1
Domains: P53
Protein Families: Druggable Genome, Stem cell - Pluripotency, Transcription Factors
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]

Transcript Variant: This variant (1) can initiate translation from two in-frame AUG start codons. The isoform represented in this variant (a, also known as p53alpha) results from translation initiation at the upstream start codon. Both variants 1 and 2 encode isoform a, which is the longest isoform.