

Product datasheet for **SC322902**

p53 (TP53) (NM_001126117) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p53 (TP53) (NM_001126117) Human Untagged Clone
Tag:	Tag Free
Symbol:	TP53
Synonyms:	BCC7; BMFS5; LFS1; P53; TRP53
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001126117, the custom clone sequence may differ by one or more nucleotides ATGTTTTGCCAACTGGCCAAGACCTGCCCTGTGCAGCTGTGGTTGATTCCACACCCCG CCCGGCACCCGCGTCCGCGCCATGGCCATCTACAAGCAGTACAGCACATGACGGAGTT GTGAGGCGCTGCCCCACCATGAGCGTCTCAGATAGCGATGGTCTGGCCCTCCTCAG CATCTTATCCGAGTGGAAGGAAATTTGCGTGTGGAGTATTTGGATGACAGAAACACTTTT CGACATAGTGTGGTGGTGCCTATGAGCCGCTGAGGTTGGCTCTGACTGTACCACCATC CACTACAACACTACATGTGTAAACAGTTCCTGCATGGCGGCATGAACCGGAGGCCATCCTC ACCATCATCACACTGGAAGACTCCAGTGGTAATCTACTGGGACGGAACAGCTTTGAGGTG CGTGTGGTGCCTGTCCCTGGGAGAGACCGCGCACAGAGGAAGAGAATCTCCGCAAGAAA GGGAGCCTCACACGAGCTGCCCCAGGGAGCACTAAGCGAGCACTGCCCAACAACACC AGCTCCTCTCCCCAGCAAAGAAGAAACCACTGGATGGAGAATATTTACCCTTCAGATG CTACTTGACTTACGATGGTGTACTTCTGATAAACTCGTCG
Restriction Sites:	Please inquire
ACCN:	NM_001126117
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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.
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).



[View online »](#)

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_001126117.1](#), [NP_001119589.1](#)

RefSeq Size: 2331 bp

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

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 (7) uses an alternate promoter and lacks multiple 5' exons, compared to variant 1. This variant can initiate translation from two in-frame AUG start codons. The isoform represented in this variant (f, also known as delta133p53gamma) results from translation initiation at the upstream start codon. It has a shorter N-terminus and a distinct C-terminus, compared to isoform a. This variant is supported by data in PMID:16131611.