

Product datasheet for **RC400040**

p53 (TP53) (NM_000546) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	p53 (TP53) (NM_000546) Human Mutant ORF Clone
Mutation Description:	R175H
Affected Codon#:	175
Affected NT#:	c.524
Nucleotide Mutation:	TP53 mutant (R175H), Myc-DDK-tagged ORF clone of Homo sapiens tumor protein p53 (TP53), transcript variant 1 as transfection-ready DNA
Effect:	Missense
Symbol:	p53
Synonyms:	BCC7; BMFS5; LFS1; P53; TRP53
E. coli Selection:	Ampicillin (100 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-Myc-DDK (PS100007)
Tag:	Myc-DDK
ACCN:	NM_000546
ORF Size:	1179 bp
Restriction Sites:	Sgfl-Mlul
Protein Sequence:	>RC400040 representing NM_000546 Red=Cloning site Green=Tags(s)

MEEPQSDPSVEPPLSQETFSDLWKLLPENNVLSPLPSQAMDDLMLSPDDIEQWFTEDEPGDEAPRMPEAA
PPVAPAAPAPTPAAPAPAPSWPLSSSVPSQKTYQGSYGFRLGFLHSGTAKSVTCTYSPALNKMFCQLAKT
CPVQLWVDSTPPPGRVTRAMAIYKQSQHMTEVVRHCPHHERCSDSDGLAPPQHLIRVEGNLRVEYLDDRN
TFRHSVVVPYEPPEVGSDCCTIHYNYMCNSSCMGMNRRPILTIITLEDSSGNLLGRNSFEVRCACPRG
DRRTEENLRKKGEPHHELPPGSTKRALPNNTSSSQPKKPLDGEYFTLQIRGRERFEMFRELNEALEL
KDAQAGKEPGGSRAHSSHLKSKKGQSTSRHKLMFKTEGPDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

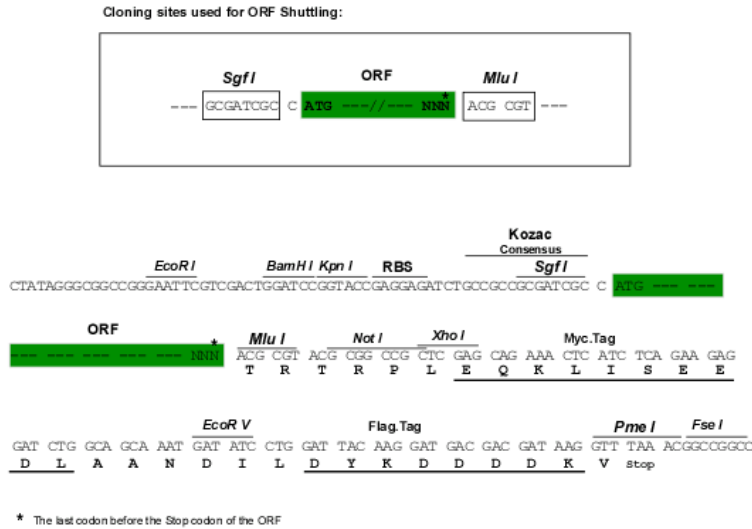
Chromatograms: /chromatograms/ja1115_f02.zip



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Restriction Sites: SgfI-MluI

Cloning Scheme:



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).

RefSeq: [NP_000537](#)

RefSeq Size: 2629 bp

RefSeq ORF: 1182 bp

Locus ID: 7157

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: 43.6 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]