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Product datasheet for RC218016

53BP1 (TP53BP1) (NM_005657) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	53BP1 (TP53BP1) (NM_005657) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	53BP1
Synonyms:	53BP1; p53BP1; p202; TDRD30
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC218016 representing NM_005657
Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC218016 representing NM_005657
Red=Cloning site Green=Tags(s)

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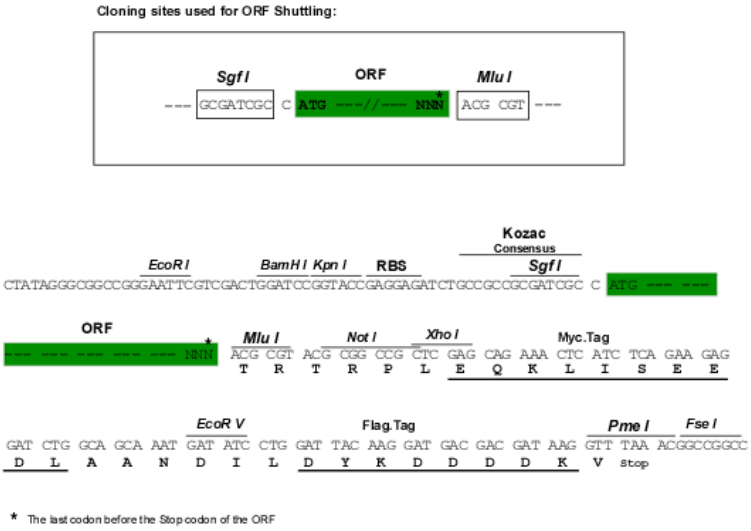
Chromatograms: https://cdn.origene.com/chromatograms/mg4291_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005657

ORF Size: 5916 bp

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.

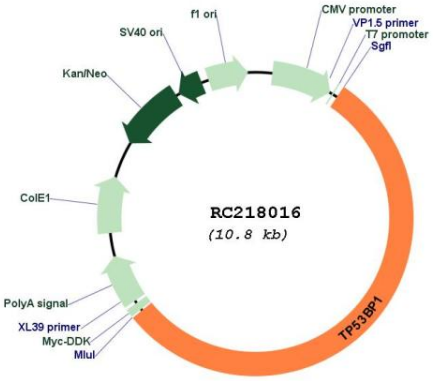
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

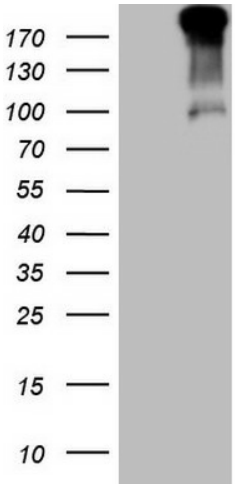
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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:	NM_005657.4
RefSeq Size:	6266 bp
RefSeq ORF:	5919 bp
Locus ID:	7158
UniProt ID:	Q12888
Cytogenetics:	15q15.3
Domains:	BRCT
Protein Families:	Druggable Genome, Transcription Factors
MW:	213.4 kDa
Gene Summary:	This gene encodes a protein that functions in the DNA double-strand break repair pathway choice, promoting non-homologous end joining (NHEJ) pathways, and limiting homologous recombination. This protein plays multiple roles in the DNA damage response, including promoting checkpoint signaling following DNA damage, acting as a scaffold for recruitment of DNA damage response proteins to damaged chromatin, and promoting NHEJ pathways by limiting end resection following a double-strand break. These roles are also important during V(D)J recombination, class switch recombination and at unprotected telomeres. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug 2017]

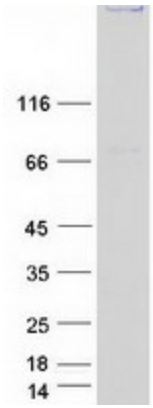
Product images:



Circular map for RC218016



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TP53BP1 (Cat# RC218016, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TP53BP1 (Cat# [TA807033])(1:2000).



Coomassie blue staining of purified TP53BP1 protein (Cat# [TP318016]). The protein was produced from HEK293T cells transfected with TP53BP1 cDNA clone (Cat# RC218016) using MegaTran 2.0 (Cat# [TT210002]).