

## Product datasheet for **SC326418**

### 53BP1 (TP53BP1) (NM\_001141979) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	53BP1 (TP53BP1) (NM_001141979) Human Untagged Clone
Tag:	Tag Free
Symbol:	TP53BP1
Synonyms:	53BP1; p53BP1; p202; TDRD30
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001141979, the custom clone sequence may differ by one or more nucleotides

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GGATTCAGCAGCATCCAAAATATAAACACGATTATGTTTCTCAC

<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_001141979
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	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.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001141979.1</a></u> , <u><a href="#">NP_001135451.1</a></u>
<b>RefSeq Size:</b>	6210 bp
<b>RefSeq ORF:</b>	5928 bp
<b>Locus ID:</b>	7158
<b>UniProt ID:</b>	<u><a href="#">Q12888</a></u>
<b>Cytogenetics:</b>	15q15.3

**Protein Families:** Druggable Genome, Transcription Factors

**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]

Transcript Variant: This variant (2) uses an alternate in-frame splice junction compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is 2 aa shorter compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.