

## Product datasheet for **RG227867**

### 53BP1 (TP53BP1) (NM\_001141979) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	53BP1 (TP53BP1) (NM_001141979) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TP53BP1
Synonyms:	53BP1; p53BP1; p202; TDRD30
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG227867 representing NM_001141979 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCTGGGGAGCAGATGGACCCTACTGGAAGTCAGTTGGATTGAGATTCTCTCAGCAAGATACTCCTT  
GCCTGATAATTGAAGATTCTCAGCCTGAAAGCCAGGTTCTAGAGGATGATTCTGGTTCTCACTTCAGTAT  
GCTATCTCGACACCTTCTAATCTCCAGACGCACAAAGAAAATCCTGTGTGGATGTTGTGTCCAATCCT  
GAACAAACAGCTGGAGAAGAACGAGGAGACGGTAATAGTGGTTCAATGAACATTTGAAAGAAAACAAGG  
TTGCAGACCCTGTGGATTCTTAACTTGGACACATGTGGTTCCATCAGTCAGGTCATTGAGCAGTTACC  
TCAGCCAAACAGGACAAGCAGTGTCTGGGAATGTGAGTGAATCTGCTCCTGCTGTGGAGGAAGAGAAG  
GGAGAAGAGTTGGAACAGAAGGAGAAGAGAAGGAAGAAGATACTTCAGGCAATACTACACATTCCTTGTG  
GTGCTGAAGATACTGCCTCATCACAGTTGGGTTTTGGGTTCTGGAACCTCTCCAGAGCCAGGATGTTGA  
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ACAGTTGAGTGTCTAAAACCTCAGAGATTGAACCAAAGAATCCCCTGAGGATCTGGGCTATCTTTGA  
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GATCACAGAAAGTCTCGTGCCTCCATGGGAGTCTCTCAGGCAAAGAAAACCTTATCACTTCTGAAGAG  
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GCCCCTGTGAGAGTGGAGACAACACCGGTGAACCTCTGCCCTGGAAGAGCAGAGAGGGCCTTTGCCTCT  
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 GGATCAAGCAGCATCCAAAATATAAACACGATTATGTTTCTCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG227867 representing NM\_001141979

Red=Cloning site Green=Tags(s)

MPGEQMDPTGSQQLSDSFSQQDTPCLIIEDSQPESQVLEDDSGSHFSMLSRHLPNLQTHKENPVLDDVSNP  
 EQTAGEERDGNSGFNEHLKENKVADPVDSSNLDTCGSIQVIEQLPQPNRTSSVLGMSVESAPAVEEEK  
 GEELEQKEKEEEDTSGNTTHSLGAEDTASSQLGFGVLELSQSQDVEENTVPYEVDKEQLQSVTTNSGYT  
 RLSDDVANTAIAKHEEQSNEDIPIAEQSSKDIPTVAQPSKDVHVVEQNPAPARSEDMPFSPKASVAAMEA  
 KEQLSAQELMESGLQIQKSPEPEVLSTQEDLFDQSNKTVSSDGCSTPSREEGGCSLASTPATTLLHLLQLS  
 GQRSLVQDSLSTNSSDLVAPSPDAFRSTPFIVPSSPTEQEGRQDKPMDTSVLSEEGGEPFQKQLQSGEPV  
 ELENPPLLPESTVSPQASTPISQSTPVFPPGSLPIPSQPQFSDHIFIPSPSLEEQSNQDGGKDGDMHSSSL  
 TVECSKTSEIEPKNSPEDLGLSLTGDSCKLMLSTSEYSQSPKMESSLSSHRIDEDGENTQIEDTEPMPVL  
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 TQSQGLCLQKEMPKKECSEAMEVETSVISIDSPQKLAILDQELEHKEQEAWEATSEDSSVVIVDVKEPS  
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 FTLPKEGDIIPPLTGATPPLIGHLKLKLEPKRHSTPIGINSYPESTIATSDVMSESMVETHDPIILGSGKGD  
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 NEARSEDPPPTPIRGNLLHFPSSQGEKEKLEGDHTIRQSQQPMKPISPVKDPVSPASQKMIQGPSSP  
 QGEAMVTDVLEDQKEGRSTNKENPSKALIERPSQNNIGIQTMECSLRVPETVSAATQTIKNVCEQGTSTV  
 DQNFQKQDATVQTERGSGEKPVAPGDDTESLHSQGEEDFMPQPPHGHVLRHMRTIREVRTLVTRVIT  
 DVYYVDGTEVERKVTEETEEPIVEQCETEVSPSQTGGSSGDLGDISSFSSKASSLHRTSSGTSLSAMH  
 SSGSSGKAGPLRGKTSGETEPADFALPSSRGGPGKLSRKGVSQTGTPVCEEDGDAGLGIRQGGKAPVTP  
 RGRGRRGRPPSRTTGRETAVPGPLGIEDISPDLSPDDKFSRVVPRVPDSTRRTDVGAGALRRSDSPEI  
 PFQAAAGPSDGLDASSPGENSFVGLRVVAKWSSNGYFYSGKITRDVVGAGKYKLLFDDGYECDVLGKIDLLC  
 DPIPLDTEVTALSEDEYFSAGVVKGHRKESGELYYSIEKEGQRKWKYKMAVILSLEQGNRLREYGLGPY  
 EAVTPLTKAADISLDNLVEGKRKRRSNVSSPATPTASSSSSTTPTRKITESPRASMGVLSGKRKLIITSEE  
 ERSPAKRGRKSATVKPVGAGEFVSPCESGDNTGEPSEALEEQRGLPLNKTFLGYAFLLTMATTSKDLAS  
 RSKLPDGPSTGSEEEEEFLEIPPFNKQYTESQLRAGAGYILEDNEAQCNTAYQCLLIADQHCRTKRYFL  
 CLASGIPCYSHVWVHDSCHANQLQNYRNYLLPAGYSLQRIEDWQPRENPFQNLKVLVSDQQQNFLEL  
 WSEILMTGGAASVKQHHSSAHNKDIALGVFDVVVTDPSCPASVLKCAEALQLPVVVSQEWVIQCLIVGERI  
 GFKQHPKYKHDIYVSH

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul



<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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>	<a href="#">NM_001141979.3</a>
<b>RefSeq Size:</b>	6210 bp
<b>RefSeq ORF:</b>	5928 bp
<b>Locus ID:</b>	7158
<b>UniProt ID:</b>	<a href="#">Q12888</a>
<b>Cytogenetics:</b>	15q15.3
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Gene Summary:</b>	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]