

Product datasheet for **MG211448**

Trp53bp1 (BC035206) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Trp53bp1
Synonyms:	m53BP1, 53BP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence: >MG211448 representing BC035206
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGGAGATCAATGATCCTCTACTTGGGAATGAAAAGGGGATTCTGAGTCTGCCCCAGAAATGGATG
GAAAATGTCTCTGAAAATGAACTGGTTAGTCCTGAGACAGAGGCCAGTGAAGAATCTTTGCAATTTAG
CCTGGAAGCCGTACAACCTGCTGAGAGAAAAATGGATCTACTGCCATTGCAGAGCCTGTTGCCAGTCTC
CAGAAGCCGGTGCTGTGTTTGGCTGCATCTATGAAGCCCAGCAAGAGAAGGAGGCTCAAAGTGAGGCTC
CTCCCTCTGCACCCGACAGGGCGAATTTGCTCCATTTTCCAAGTGTCTAAGAAGAAGACAAGAAAGACC
AGATGTTAACCCCAACCTCAGGCAGAGTGAACAGCCTGTGAAGCCTGTTGGCCTGTATGGACGATGCT
GCTCCCGAGGACTCAGCTTCTCCTGTTTCGAGCAGAGGGCCTCACAGGAGCCCTTCAGTCTGCAGAGG
ACGTGATGGAACAGACCTGCTGGAAGGACTGGCTGCTAACAGGACAGACCTAGTAAGATGTTGATGGA
CAGGCCCAACCCAGAGTAACATCGGGATCCAGACCGTGGACCATTCCTGTGTGCCCCAGAACTGTCTCG
GCAGCAACGCACTGTGAAGAGTGTGTGTGAGCAGGGGACCACTACAGCGGAGCAGAACTCTGGGAAAC
AAGATGCCACTGTGCAGACTGAGAGGGGAGTGGAGAGAACTGCCAGTGTCCCGTGGACGACACAGA
GTCCCTCCACAGCCAGGGGGAAGAGGAATTTGAAATGCCCCAGCCTCCGCATGGCCATGTCTTGCATCGC
CACATGAGAACCATTGAGAAGTCCGTACACTCGTCACCCGCGTCATCACAGATGTTTATTATGTGGATG
GGACAGAAAGTGGAAAGGAAAGTAACGAGGAGACTGAAGAACCAATCGTAGAGTGTACGGAATGTGAAAC
AGAAGTTTCCCTTCACAGACTGGAGGTTCTCTGGGGACCTGGGGGACATCAGCTCCTTCTCTCCAAA
GCTTCCAGCTCACACCACATCCAGTGAACAAGTCTCTCAGCCATACACAGCAGTGGCAGCTCAGGGC
GAGGAGCTGGGCCACTCAAAGGAAAAGCCAGTGGGACAGAAGCTGCAGATTTTGCCTTACCCAGTTCCCG
AGGAGGCCCAAGAAAAGTGAAGTCTAGAAAAGGGATCAGTCAGACAGGGGACCGGTGTGTGAGGAAGAT
GGTGTGTCAGGCTTGGCATCAGACAGGGAGGGAAGGCTCCAGTTACACCTCGTGGGCGTGGGCGAAGGG
GCCGCCACCTTCTCGGACCACTGGAACAGAGAAACAGTTGTCTCTGGTCCGTTGGGCGTAGAAGATAT
TTCACCTAGCATGTCACAGATGACAAGTCTTACCCGCATTATGCCTCGTGTGCCAGATTCTACCAA
CGGACGGATGCCAGTTCTAGTACTTTGCGCGGAGTGATTCTCCAGAGATTCTTTTACGGCTGCTACTG
GTTCTCTGATGGCTTGGATTCTCATCTTCAGGAAACAGCTTTGTGGGTCTCCGTGTTGTAGCTAAGTG
GTACATCCAATGGTACTTTTACTCTGGGAAGTACCCGAGATGTGGGGCTGGGAAGTACAAGTGCTC
TTTGATGATGGGTACGAATGTGACGTGCTGGGCAAGACATTCTCCTGTGTGACCCCATCCCCCTGGACA
CTGAAGTGACAGCCCTCTCAGAAGATGAATATTTCAAGTGCAGGAGTGGTAAAAGGACATAGGAAGGAGTC
TGGGGAGCTGTATTACAGCATTGAAAAAGAAGGCCAAAGGAAGTGGTATAAACGAATGGCGGTATTCTG
TCCTTGGAGCAAGGAAACAGACTGAGAGAGCAATATGGGCTTGGCCCATATGAAGCTGTACACCCGCTCA
CGAAGGCAGCAGATACAGCTTAGACAATTTGGTGAAGGAAAGCGGAAACGGCGCAGTAACATCAGCTC
CCCAGTCACCCCCACTGCCGCCAGTAGCAGCAGCACAAACGCCACACGTAAGCCACAGAGAGTCCCCGT
GCTTCCACGGGAGTCCCGTCAGGCAAAAGGAACTTCCGACTTCTGAAGAGGAACGCTCTCCTGCTAAGC
GAGGTGAAAGTCTGCCACCGTGAACCTGGAACAGTGGGGCAGCAGAGTTTGTGAGTCCCTGTGAGAC
TGGAGACAACATAGGTGAGCCTTCTGTCTAGAAGAGCCAAGAGGCTTTGCCCTCAACAAGACCTTG
TTTCTGGGCTATGCCTTTCTCCTCACCATGGCTACAACAGTGAAGCTGGCCAGTCGCTCTAAGCTGC
TAGATGGTCTACAGGAAGCAGTGAAGAAGAGGAGGAATTTTAGAAATTCCTCCTTCAACAAGCAGTA
TACAGAATGCCAGCTTCGAGCAGGAGCTGGGTATATCCTTGAAGACTTCAATGAAGCCAGTGTAACACA
GCCTACCAAGTGTCTCTAATTGCGGACAGCACTGTGCAACCCGGAAGTACTTCTGTGCTTGGCAGTG
GCATTCTTGTGTCTCATGTCTGGGTCATGACAGTTGCCATGCCAACCAACTTCAAACTATCGTAA
TTATCTGCTGCCTGCTGGGTATAGCCTTGAAGAGCAACGAATTCTGGATTGGCAACCCCGTGAACCCCT
TTCCAGAATCTGAAGTCTCTTGGTGTGAGTCAACAACAGAACTTCTGGAGCTCTGGTCTGAGATCC
TCATGACTGGAGGGGACGCTCTGTGAAGCAGCACCATTCAAGTGGCCACAACAAGACATTGCTTTAGG
GGTATTTGATGTGGTGGTGAAGACCCCTCATGCCAGCCTCGGTGCTCAAGTGTGCTGAAGCCTTGCAA
CTGCCTGTGGTATCACAAGAATGGGTGATCCAGTGCCTCATTGTTGGGGAGAGAATTGGATTCAAGCAGC
ATCCAAAATATAAATGATTATGTTTCTCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG211448 representing BC035206

Red=Cloning site Green=Tags(s)

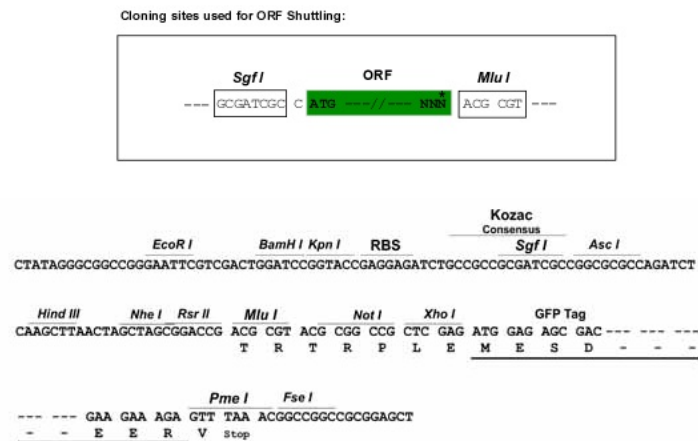
MVEINDPLLGNEKGDSESAPEMDGKLSLKMMLVSPETEASEESLQFSLEKPTTAERKNGSTAIAEPVASL
QKPVPVFGCIYEAAQKEAQAQSEAPPSAPDRANLLHFPSAQEEDKERPDVTPNLRQSEQPVKPVGPMDDA
APEDSASPVSQQRASQEPFSPAEDVMETDLEGLAANQDRPSKMLMDRPTQSNIGIQTVDHSLCAPETVS
AATQTVKSVCEQGTSTAEQNSGKQDATVQTERGSGEKPASAPVDDTESLHSQGEFEMPQPPHGHVLRH
HMRTIREVRTLVTTRVITDVYYYVDGTEVERKVTEETEEPIVEQCQECETVSPSQTGSSGDLGDISSFSK
ASSSHHTSSGTSLSAIHSSGSSGRGAGPLKGKASGTEAADFALPSSRGGPGKLSPRKGISQGTAPVCEED
GDAGLGIRQGGKAPVTPRGRGRGRPPSRRTTGRETIVVSGPLGVEDISSMSPPDDKSFTTRIMPRVPDSTK
RTDASSSTLRRSDSPEIPFQAATGSSDGLDSSSSGNSFVGLRVVAKWSSNGYFYSGKITRDVGAGKYKLL
FDDGYECDVLGKDILLCDPIPLDTEVTALSEDEYFSAGVVKGHRKESGELYYSIEKEGQRKWKYKRMVIL
SLEQGNRLREQYGLGPYEAVTPLTKAADISLDNLVEGKRKRNSNISSPVTPTAASSSTTTPRKATESPR
ASTGVPSGKRKLPTSEERSPAKRGRKSATVKPGTVGAAEFVSPCETGDNIGEPSVLEEPRLPLNKT
FLGYAFLLTMTATSDKLASRKLDDGPTGSSEEEEFLEIPPFNKQYTECQLRAGAGYILEDNEAQCNT
AYQCLLIADQHCRTKRYFLCLASGIPCVSHVWHDCHANQLQNYRNYLLPAGYSLEEQRIIDWQPRENP
FQNLKVLVSDQQNFLELWSEILMTGGAASVKQHHSSAHNKDIALGVFDDVVVTDPSCPASVLKCAEALQ
LPVVSQEWVIQCLIVGERIGFKQHPKYKHDYVSH

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

BC035206

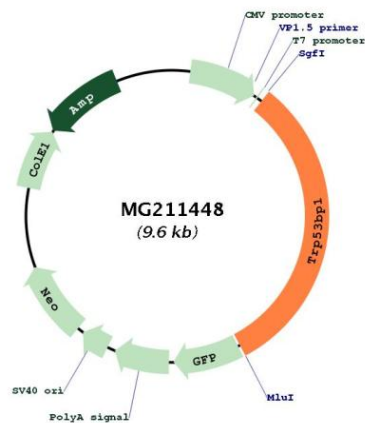
ORF Size:

3042 bp

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).
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	BC035206 , AAH35206
RefSeq Size:	3441 bp
RefSeq ORF:	3044 bp
Locus ID:	27223
Cytogenetics:	2 E5

Gene Summary:

Double-strand break (DSB) repair protein involved in response to DNA damage, telomere dynamics and class-switch recombination (CSR) during antibody genesis (PubMed:15159415, PubMed:15077110, PubMed:20453858, PubMed:23333305, PubMed:26308889, PubMed:20362325). Plays a key role in the repair of double-strand DNA breaks (DSBs) in response to DNA damage by promoting non-homologous end joining (NHEJ)-mediated repair of DSBs and specifically counteracting the function of the homologous recombination (HR) repair protein BRCA1 (PubMed:23333305, PubMed:20362325). In response to DSBs, phosphorylation by ATM promotes interaction with RIF1 and dissociation from NUDT16L1/TIRR, leading to recruitment to DSBs sites. Recruited to DSBs sites by recognizing and binding histone H2A monoubiquitinated at 'Lys-15' (H2AK15Ub) and histone H4 dimethylated at 'Lys-20' (H4K20me2), two histone marks that are present at DSBs sites. Required for immunoglobulin class-switch recombination (CSR) during antibody genesis, a process that involves the generation of DNA DSBs (PubMed:15159415, PubMed:15077110). Participates to the repair and the orientation of the broken DNA ends during CSR (PubMed:26308889). In contrast, it is not required for classic NHEJ and V(D)J recombination (PubMed:15159415). Promotes NHEJ of dysfunctional telomeres (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:

Circular map for MG211448