

Product datasheet for **MC223081**

Trp53bp1 (BC035206) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Trp53bp1 (BC035206) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Trp53bp1
Synonyms:	m53BP1, 53BP1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>BC035206 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGGAGATCAATGATCCTCTACTTGGGAATGAAAAAGGGATTCTGAGTCTGCCCCAGAAATGGATG
GAAAACGTCTCTGAAAATGAACTGGTTAGTCTCTGAGACAGAGGCCAGTGAAGAATCTTTGCAATTTAG
CCTGGAAAAGCCTACAACCTGCTGAGAGAAAAAATGGATCTACTGCCATTGCAGAGCCTGTTGCCAGTCTC
CAGAAGCCGGTGCCTGTGTTGGCTGCATCTATGAAGCCAGCAAGAGAAGGAGGCTCAAAGTGAGGCTC
CTCCCTCTGCACCCGACAGGGCGAATTTGCTCCATTTTCCAAGTCTCAAGAAGAAGACAAGAAAGACC
AGATGTTACCCCAAACCTCAGGCAGAGTGAACAGCCTGTGAAGCCTGTTGGGCTGTGATGGACGATGCT
GCTCCCGAGGACTCAGCTTCTCCTGTTTCGCAGCAGAGGGCCTCACAGGAGCCCTTCAGTCTGCAGAGG
ACGTGATGGAAACAGACCTGCTGGAAGGACTGGCTGCTAACAGGACAGACCTAGTAAGATGTTGATGGA
CAGGCCACCCAGAGTAACATCGGGATCCAGACCGTGGACCATTCCCTGTGTGCCCCAGAACTGTCTCG
GCAGCAACGCAGACTGTGAAGAGTGTGTGTGAGCAGGGGACCAGTACAGCGGAGCAGAACCTGGGAAAC
AAGATGCCACTGTGCAGACTGAGAGGGGAGTGGAGAGAAACCTGCCAGTCTCCCGTGGACGACACAGA
GTCCCTCCACAGCCAGGGGAAGAGGAATTTGAAATGCCCCAGCCTCCGCATGGCCATGTCTTGCAATCGC
CACATGAGAACCATTGAGAAGTCCGTACACTCGTACCCGCGTCATCACAGATGTTTATTATGTGGATG
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AGAAGTTTCCCCTTACAGACTGGAGGTTCTCTGGGGACCTGGGGGACATCAGCTCCTTCTCTCCAAA
GCTTCCAGCTCACACCACACATCCAGTGGAAACAAGTCTCTCAGCCATACACAGCAGTGGCAGCTCAGGGC
GAGGAGCTGGGCCACTCAAAGGAAAAGCCAGTGGGACAGAAGCTGCAGATTTTGCCTTACCCAGTCCCG
AGGAGGCCAGGAAAACGTAGTCTAGAAAAGGGATCAGTCAGACAGGGGCACCGGTGTGTGAGGAAGAT
GGTGTGATGCAGGCTTGGCATCAGACAGGGAGGGAAGGCTCCAGTTACACCTCGTGGGCGTGGGCGAAGGG
GCCGCCACCTTCTCGGACCACTGGAACAGAGAAACAGTTGTCTCTGGTCCGTTGGGCGTAGAAGATAT
TTCACCTAGCATGTACCCAGATGACAAGTCTTACCCGCATTATGCCTCGTGTGCCAGATTCTACCAAA
CGGACGGATGCCAGTTCTAGTACTTTGCGGCGGAGTGATTCTCCAGAGATTCTTTTCAGGCTGCTACTG



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GTTCTCTGATGGCTTGGATTCCATCTTCAGGAAACAGCTTTGTGGTCTCCGTGTTGTAGCTAAGTG
GTCATCCAATGGCTACTTTACTCTGGGAAGATCACCCGAGATGTGGGGCTGGGAAGTACAAGCTGCTC
TTTGATGATGGGTACGAATGTGACGTGCTGGGCAAGACATTCTCCTGTGTGACCCCATCCCCCTGGACA
CTGAAGTGACAGCCCTCTCAGAAGATGAATATTTTCAGTGCAGGAGTGGTAAAGGACATAGGAAGGAGTC
TGGGGAGCTGTATTACAGCATTGAAAAAGAAAGGCCAAAGGAAGTGGTATAACGAATGGCGGTATTCTG
TCCTTGGAGCAAGGAAACAGACTGAGAGAGCAATATGGGCTTGGCCATATGAAGCTGCACACCGCTCA
CGAAGGCAGCAGATATCAGCTTAGACAATTTGGTGAAGGAAAGCGAAACGGCGCAGTAACATCAGCTC
CCAGTCACCCCACTGCCGCCAGTAGCAGCAGCACACGCCACACGTAAAGCCACAGAGAGTCCCGT
GCTTCCACGGGAGTCCCGTCAGGCAAAAGGAACTTCCGACTTCTGAAGGGAACGCTCTCCTGCTAAGC
GAGGTCGAAAGTCTGCCACCGTGAACCTGGAACAGTGGGGCAGCAGAGTTTGTGAGTCCCTGTGAGAC
TGGAGACAACATAGGTGAGCCTTCTGTCTAGAAGAGCCAAGAGGGCCTTGGCCCTCAACAAGACCTTG
TTTCTGGGCTATGCCTTCTCCTCACCATGGCTACAACACTAGTACAAGCTGGCCAGTCGCTTAAGCTGC
TAGATGGTCTACAGGAAGCAGTGAAGAAGAGGAGGAATTTTGAAGAAATCCTCCTTCAACAAGCAGTA
TACAGAATGCCAGCTTCGAGCAGGAGCTGGGTATATCCTTGAAGACTTCAATGAAGCCAGTGAACACA
GCCTACCAGTGTCTCCTAATTGGGACCAGCACTGTGCAACCCGGAAGTACTTCTGTGCCTTGGCAGTG
GCATTCTGTGTGTCTCATGTCTGGGTCCATGACAGTTGCCATGCCAACCAACTCAAAACTATCGTAA
TTATCTGCTGCCTGCTGGGTATAGCCTTGAAGAGCAACGAATTCTGGATTGGCAACCCCGTGAACCCCT
TTCCAGAATCTGAAGTCTCTTGGTGTGAGATCAACAACAGAATCTTGGAGCTCTGGTCTGAGATCC
TCATGACTGGAGGGGCGAGCCTCTGTGAAGCAGCACCATTCAAGTGCCACAACAAGACATTGCTTAGG
GGTATTTGATGTGGTGGTACAGACCCCTCATGCCAGCCTCGGTGCTCAAGTGTGCTGAAGCCTTGCA
CTGCCTGTGGTATCACAAGAATGGGTGATCCAGTGCCTCATTGTTGGGGAGAGAATTGGATTCAAGCAGC
ATCCAAAATATAAACATGATTATGTTTCTCACTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	BC035206
Insert Size:	3045 bp
OTI Disclaimer:	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).
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:	<ol style="list-style-type: none">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:	<u>BC035206</u> , <u>AAH35206</u>
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]