

## Product datasheet for **MG214044**

### Usp51 (NM\_001137547) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Usp51 (NM_001137547) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Usp51
Synonyms:	AV136873
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG214044 representing NM\_001137547  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCGGGGTACACAGGGAGCCCAGGAGATGAAGCCGGAGCTGTGGCCGGAGCCCAAGCCACGTCGGAGA  
 ACTTAACAAGTAGGGCAGTGGCAGCTATGAGAAGGTGCTCCCTTCTATCCCGGCTGCTTGTACACCCAG  
 CTCAGCTCGGTTTGCCCGCGCCGAAGCCCGCCCTCGGCCAGCCAGGTCCCGCTCCAGGGGAGGG  
 CGTGGGCTCAAGGCCACCCCGCCTCCCGCAAACCTCCGCCTCCCGCCAGCGCCGCCACCTCCAC  
 CCCTGCCAAGCAGCGGTCCGGTGGCTGGCGCAATCCAGACGTAGATCCAGGCTGGACCCAGACCCCA  
 AACACGGAAAAGCTACTCTAGTGACCATGGCTCCTCTAGGGATTCAGATGGCTCAGAGAACAGTTTACTG  
 GAGGTAGGTCTAATAAGGGTCCCACAGGCTGCTGTCATGTAGAGAGCTTAAAGTAGCTAAAACTGGC  
 AGAAGAACCTGCGGATGATCTATCAGCGTTTCATTTGGAGTGAAACCCCGGAGACTAGGAAACGTAAGGC  
 AAAGTCATGCATCTGTCAAATATGTAGTACTACAAGAACAGACTCCACTCTTGTCTGCTGTGTATTT  
 TTTGGATGCTTTACTGACAAACATATTCACATTCATGCCGAAACAACGCAACACAATTTAGCAGTAGACC  
 TCTGTCATGGGGTTATATATTGCTTTATGTGTAGGGATTATGTATATGACAAAGATATAGAAAAGATCGC  
 CAAAGAAACAAAAGAAAAAATTCTGGGACTGTTATCATCCCTACAGGAGATGCATCTTATCAGCAGTTG  
 ATGGCATCTGAGGTGGAAGAAAACCAATTAACCTGCGAGTCAAAAAGATCAGGAGACCAGTTTGGTAAAC  
 CCAAGAAAAAGAGGAGGAAAAAGACAATGTATTACTGTAGGCTTCAGAGGATTAATTAATCTTGGTAA  
 TACTTGCTTTATGAATTGATTGTCCAAGTACTACTCACATTCGGCTACTGAAAGAGTTCTTCTTTCA  
 AATAAGCACAAATGTATGATGACAAGCCCAGCTTGTGTTTAGTCTGCGAGATGTCTTTACTTTTTCAAG  
 CTATGTACTCGGGGAACCAAGTCCTCATATCCCTATAAATTACTACACCTGATATGGATCCATGCAGA  
 GCATCTAGCAGGCTACAGACAACAGGATGCTCAGGAGTTTCTTATTGCCATATTGGATGTGTTGCATAGA  
 CACAGCAGAGATGATGGTATCGACCAGGAAGGTAACCTCAACTGCTGTAATTGCATCATAGATCACATCT  
 TTACAGGTAGTCTGCAGTCAGATTTAACATGTCAAGTTTGTATGGTGTCTCTACTACCATAGACCCATG  
 CTGGGACATTAGCTTGGATTTGCCTGGGCCTTATACTCCAGGGAGGGCTAGTAGTAGCACATCGAGTAGG  
 GATGGCCAGAAGCCAGGTCATCTCACTTACAGATTGCCTGAAGTGGTTTACAAGGCCGAAGACCTGG  
 GTAGCAGTGCCAAAATCAAATGCAGTCAATGCCAAAGCTACCAGGAATCTACCAAACAGCTCACAATGAA  
 GAAATTACCGATTGTGGCCTGCTTTCACCTGAAAAGATTTGAACATTTAGGCAAACAGAGACGAAAGATT  
 AATAGTTTTATCTGTTTCTTTGGAGCTGGACATGACCCGTTCTTGGCTTCTACTAAAGAAAGCATAA  
 TGAAGGCCAGCCATTAACAGAGTGTGTACCCAGTGAGAATAAGTATTCTTTGTTTGCAGTAATTAACCA  
 CCATGGAACCTTTGGAAAGTGGCCATTACACCAGTTTTGTCCGACAGGAAAAAGACCAGTGGTTACAGCTG  
 GATGATGCTGTAGTCACCAAGGCTACAATGGAAGAATTACTCAATAGTGAAGGGTATCTACTGTTCTATC  
 ATAGGCAAGATATAGAGAAAGAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG214044 representing NM\_001137547  
 Red=Cloning site Green=Tags(s)

MRGTQGAQEMKPELWPEPKPTSENLTSRSGSYEKVLP SIPAACHTSSSSVCPRRKPRPRPQPRSRSGG  
 RGLKAPPPPAKPPPPAPPPPLPKQRSVAWRNSRRSRPGPRPQTRKSYSSDHGSSRSDGSENLL  
 EVGSNKGPTGCCHVESFKVAKNWQRNLRMIYQRFIWSGTPETRRKAKSCICQICSTHKNRLHSCLSCVF  
 FGCFTDKHIHHAETTQHNLAVDLCHGVIYCFMCRDYVYDKDIEKIAKETKEKILGLLSSPTGDASYQQL  
 MASEVEENQLTCESKDQETSLVKPKKRRKMTMYTVGFRGLINLGNTCFMNCIVQLVTHIPLLKEFFLS  
 NKHKCMMTSPSLCLVCEMSLLFQAMYSNGQSPHIPYKLLHLIWIHAEHLAGYRQQDAQEFLIAILDVLRH  
 HSRDDGIDQEGNSNCCNCIIDHIFTGSLQSDLTCQVCHGVSTTIDPCWDISLDLPGPYTPGRASSSTSSR  
 DGQKPRVISLTDCLKWFRPEDLGSSAKIKSCQCSYQESTKQLTMKKLPVACFHLKRFEHLGKQRRKI  
 NSFISFPLELDMTPFLASTKESIMKQPLTECVSENKYSLFAVINHHGTLESGHYTSFVRQEKDQWFSC  
 DDAVVTKATMEELLNSEGYLLFYHRQDIEKE

TRTRPLE - GFP Tag - V

**Restriction Sites:**

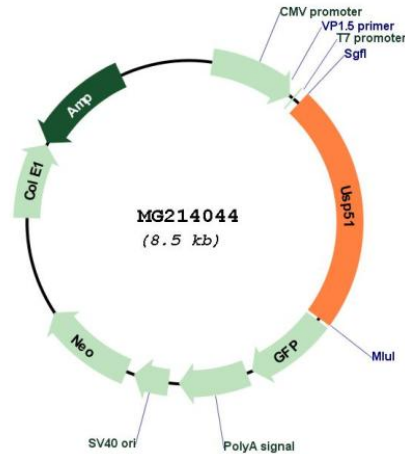
SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_001137547

ORF Size: 1983 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.

RefSeq: [NM\\_001137547.1](#), [NP\\_001131019.1](#)

RefSeq Size: 2249 bp

RefSeq ORF: 1986 bp

Locus ID: 635253

UniProt ID: [B1AY15](#)

Cytogenetics: X F3

**Gene Summary:** Deubiquitinates histone H2A at 'Lys-13' and 'Lys-15' and regulates DNA damage response. USP51 is recruited to chromatin after DNA damage and regulates the dynamic assembly/disassembly of TP53BP1 and BRCA1 foci.[UniProtKB/Swiss-Prot Function]