

Product datasheet for **MG215023**

D7Ert443e (NM_001081331) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	D7Ert443e
Synonyms:	4933400E14Rik; FATS; Gm497
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence: >MG215023 representing NM_001081331
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTACTATAGGGCGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGATATCACCTGTGGTCATTTCCCGGCTGATTGATGAAAAGAAATCTATGGAAAATGGAGCAATATTGC
 CACAAGCCATTGCTCAGCCTCAGCTGTGTCCCACAAAGCCAGCTTTGGCCAGGCGCATGGAGTGAGCAT
 GCACAGGCGATTTGCTTATCTCCAGACAGACTGGGAATTTGACTCCATCAGATGATCAAGGACTGGAG
 ACAGAACCGCTGTCTACAGGGGACAATCTAGGCAAAGGTTCCACAGCGGTTTCTCGTCTATCACCATTA
 CTGCCCGCAGTGTGGCCCTCCAGCCAGCAGCTTGGTATGGGACACTTTTAGGGACCACTGTGTCCCAA
 GTGCAAAGCCAAGGATGCTCTGTTCCAAGAGCCCAAGTTCTGGCTGGTATGCCCATCTCTGTACAGCAC
 AATAGACCCTTACCTGTACAGAGTCCCCAGCAATGGCTCCGTAGAGGGGATGAAGGTTTTCCAGGCTC
 ACTCAAGGCTGAGTGAAGGCAGGACTACTGGGTACCCACACGAATGACAATGAGGACAGTTTTTCTTC
 AGACAATTCACCATCGAGAAAAGTCCCACTGGTGTTCAGTTCTTGTGTCCACTCCGGGTGTCTCAGCAG
 TGTCCTCAATGCCATTTACTATTTGGACAAGTCTTTTCTGTTCCCTTGAGCGACCTCAAATTTGCTAGCC
 CCAAAATGCACAGGTCTGTCTGTCTCAGCCTCCGCTGTAGTTCCACCAAGTTAACAGCAGATGGAGT
 AGACAGCTCAGTAATGGAGAGCCAATCAGCACAGCTCTATCACAGGAATCTCGGAGGGAAAGCAGGAC
 CTCCTAGTCCACAATGGGGCCAGCCACAAGTGGTCACTGGAAGGAGAGCCAGCATTGGTGCCAGTAC
 ATTTGGGGAGTGGCACATGCCCTCGGACTGGCTCCCCTCCACTGGAAAATGTCAAATTTGCAGACGTGGG
 AAGGAACCAGGTCCAGTACGAAAGGAGAAAGAGGACCATGCAACATGTACCAGTAGCAGCCACACCAAC
 CAACTCTCCATCCATATTTCCCGGCTGGAGTTACAGGGCTGAAACAAAAGTACTTTCTGGAAGCAAGAAGC
 AGCAGCAAGAAGCACAAGAAGTCTTCTGCTTTCCAGTGGGACAGAAGACCATTAAACACTTCCCTCC
 TGAAGGGGACAGTTCAACAAGCAGTATGGTCAACCTAGCATCCTTTTCCAGAGTCCAATGAGAGGCAACAC
 CCATACTTCATGATACCCAGAGTCCCTCTGCTGGGTTTTATTGCCCTTACAAAAGTGGGTGTGCTCTC
 TGCAGGAAGATGGTGTGTTTCCAGATAGAAACACACTTCCCAAGATTACACGTGTGTGACTTGGTTGT
 AAACTAAAAGGAATGTGAGAAGAACGAAGCCCACTGTACCCCTGAGCCCTCACCAGCAACCCCTCT
 CCATCAACCCAGAGGGAGCACAGAGCTCTGACCCATCAGAAGATAGTTACGAGCCTCTGCTGGCAAGTT
 CTATGACTTTGAGGAAGCACTGGAAGTCCATAGACCTCAGTTCATTTCTCGCTCACAAGAACGGCTGCA
 AAAGCTTAAGCGCATGGTACAGCAAAGGAAAACCAACAAAAGGAGAGCCTGGGGCAGAAGCAGAGCCTA
 CTTCTGTCCGCGCAACAAGAAGCAGTTCACCATTCCCATCCTTCTAGTATAACTTGTCAAACCCA
 AAGAAAAGATGCATTTAGAGAAAGGAGATGCATATGAGATCTAAAAGAATCTATAATAATTTGCCGGAAGT
 TAAAAAGAAAAAGAGAGCAGAAGAAAAGAAATGATCTTACAGAGTAACCGGCTCCGAGCAGAAGTCTTC
 AAAAGCAATTACTGGACCAGCTCCTTCAAAGGAATGCAGTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

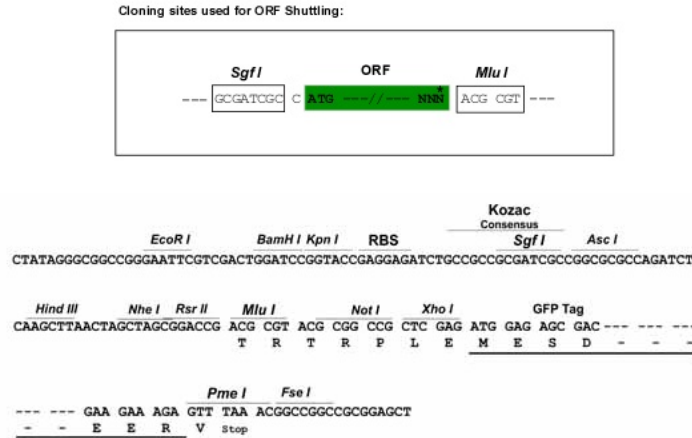
Protein Sequence: >MG215023 representing NM_001081331
 Red=Cloning site Green=Tags(s)

MISPVVISRLIDEKKS MENGAILPQAIAQPQLCPTKPALARRDGVSMHRRFALSPDRLGILTPSDDQGLE
 TEPLSTGDNLGKGS HSGFSSITITARRVGPASSLVWDTRDPLCPKCKAKDALFQEPPVLAGDAHL CQH
 NRPFTCTESPSNGSVEGMKVFQAHSRLSARQDYWVHTNDNEDSFSSDNSPSRKVPLVFSSCVHFRVSQQ
 CPNAIYYLDKLSVPLERPQIASPKMHRSVLSLSLRCS SHQLTADGVDS SANGEP I STALSQELSEGKQD
 LLGPQWQPQGGHWKESPALVPVHLGSGT CPRTGSPPLENVKFADVGRNQVVRKEKEDHATCTSSHTN
 QLSIHIPGWSYRAETKVLSGSKKQQQEAQRTPAFPVGQKTIKHFPEPGESSPSSDGQPSILSESNERQH
 PYFMIPRVPLPGFYCPLQTGCASLQEDGAVQIETHFPKDYTCDDL VVKLKECEKNEPTVTPEPSPATPS
 PSTPEGAQSSDPSSEDSYEPLLASSMTLQEALVHRPQFISRSQERLQKLRMVQQRKTQQKESLQKQKSL
 LPVRANKKQFTIPHPLSDNLFKPKERCISEKEMHMRKRIYNNLPEVKKKKEEQKRMILQSNRLRAEVF
 KKQLLDQLQRNAV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001081331

ORF Size: 1932 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: [NM_001081331.2](#)

RefSeq Size: 2425 bp

RefSeq ORF: 1935 bp

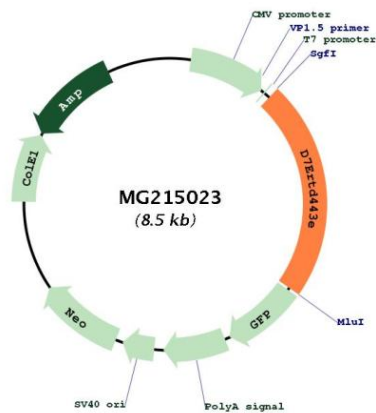
Locus ID: 71007

UniProt ID: [D2J0Y4](#)

Cytogenetics: 7 78.4 cM

Gene Summary: Tumor suppressor that is required to sustain G2/M checkpoint after DNA damage (PubMed:20843368, PubMed:20154723, PubMed:24240685). Acts as a p53/TP53 activator by inhibiting MDM2 binding to p53/TP53 and stimulating non-proteolytic polyubiquitination of p53/TP53. Exhibits ubiquitin ligase (E3) activity and assemble ubiquitin polymers through 'Lys-11'- (K11-), 'Lys-29'- (K29-) and 'Lys-63'- (K63)-linkages, independently of the ubiquitin-conjugating enzyme (E2). Promotes p53/TP53-dependent transcription of CDKN1A/p21, leading to robust checkpoint response (PubMed:24240685). Mediates CDKN1A/p21 protein stability in a ubiquitin-independent manner. Interacts with HDAC1 and prevents binding of HDAC1 to CDKN1A/p21 and facilitates the acetylation and stabilization of CDKN1A/p21 (PubMed:20154723). May have a role in the assembly of primary cilia (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG215023