

## Product datasheet for **MG221899**

### Fanci (NM\_145946) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Fanci (NM_145946) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Fanci
Synonyms:	MGC38195; MGC38407
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG221899 representing NM_145946 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATCTGAAAATTTTATCTCTAGCAACAGATAAACTACAGATAAACTGCAGGAGTTTCTCAAACCC  
TGAAAGATGATGATTTGGCCAGTCTCCTCAGAACCAAGCGGTGAAAGGAAGAGCTGTTGGAACGCTCCT  
GAGAGCCGTCCTCAAAGGCTCCCCCTGCTCTGAGGAAGATGGAGCCCTTAGGAGATACAAGATATATTCT  
TGCTGTATCCAGTTGGTGAATCGGGAGATTTGCAGCAAGATGTCGCATCAGAGATCATAGGATTACTAA  
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TGTGTTCTGTCAGATGGCCTCAACGGTACATGATCCAGCTCACTTCTGTGTTCAAGGATGTCTGTCTAAC  
GCCAGAAGAGATGAATCTCGTGGTGGCCAAAGTGTGACGATGTTCTCAAAGTTGAATCTTCAAGAAATT  
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TGATCTTTTAAAGACTTCTGTTGTA AAAAGCTTCAAGGATCTTCAGCTCCTCCAAGGCTCCAAGTTTCTT  
CAGACTCTCGTCCCCAGAGAACTTGTGTTTCAACCATGATCTTAGAAGTGGTGAGGAACAGTGTTCATA  
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CCCCCCAGACCGTGCAAGGGCTGCTCAAGGCGGTGCAGCCGCTTCTCAAGATCAGCATGTCGATGAGAG  
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GGGCACTGCATCAGCACATACACAGCAGGACAGAGAACCAGCCAAGAAGAGGAGGAAGAAATGCCTGAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG221899 representing NM\_145946  
 Red=Cloning site Green=Tags(s)

MDLKILSLATDKTTDKLQEFQLTKDDDLASLLQNQAVKGRAVGTLLRAVLKGGSPCSEEDGALRRYKIYS  
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 PLQTVQGLLKAVQP L LKISMSMRDSLILVLRKAMFASQLDARKSAVAGFL L L L L K N F K V L G S L P S S Q C T Q S  
 IGVTQVRVDVHSRYSAVANETFLEIIDS L K R S L G Q Q A D I R L M L Y D G F Y D V L R R N S Q L A S S I M Q T L F S Q L  
 KQFYEPEDLLPPLKLGACVL T Q G S Q I F L Q E P L D H L L S C I Q H C L A W Y K S R V V P L Q Q G D E G E E E E E E L Y S E  
 L D D M L E S I T V R M I K S E L D F E L D K S A D F S Q N T N V G I K N N I C A C L I M G V C E V L M E Y N F S I S N F S K S K F E E I  
 L S L F T C Y K K F S D I L S E K A G K G K A K M T S K V S D S L L S L K F V S D L L T A L F R D S I Q S H E E S L S V L R S S G E F M H Y  
 A V N V T L Q K I Q Q L I R T G H V S G P D G Q N P D K I F Q N L C D I T R V L L W R Y T S I P T S V E E S G K K E K G K S I S L L C L E G  
 L Q K T F S V V L Q F Y Q P K V Q Q F L Q A L D V M G T E E E E A G V T V T Q R A S F Q I R Q F Q R S L L N L L S S E E D F N S K E A L L  
 L I A V L S T L S R L L E P T S P Q F V Q M L S W T S K I C K E Y S Q E D A S F C K S L M N L F F S L H V L Y K S P V T L L R D L S Q D I H  
 G Q L G D I D Q D V E I E K T D H F A V V N L R T A A P T V C L L V L S Q A E K V L E E V D W L I A K I G S A N Q E T L S D K V T P E D A  
 S S Q A V P P T L L I E K A I V M Q L G T L V T F F H E L V Q T A L P S G S C V D T L L K G L S K I Y S T L T A F V K Y Y L Q V C Q S S R G  
 I P N T V E K L V K L S G S H L T P V C Y S F I S Y V Q N K S S D A P K C S E K E K A A V S T T M A K V L R E T K P I P N L V F A I E Q Y E  
 K F L I Q L S K K S K V N L M Q H M K L S T S R D F K I K G S V L D M V L R E D E E D E N E E G T A S A H T Q Q D R E P A K K R R K K C L S

TRTRPLE - GFP Tag - V

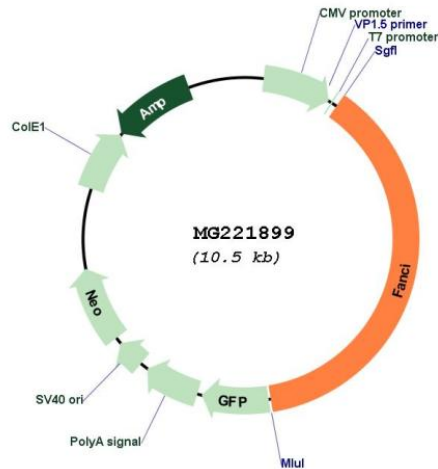
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_145946

ORF Size: 3990 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\\_145946.2](#), [NP\\_666058.2](#)

RefSeq Size: 4621 bp

RefSeq ORF: 3993 bp

Locus ID: 208836

UniProt ID: [Q8K368](#)

Cytogenetics: 7 D2

**Gene Summary:**

Plays an essential role in the repair of DNA double-strand breaks by homologous recombination and in the repair of interstrand DNA cross-links (ICLs) by promoting FANCD2 monoubiquitination by FANCL and participating in recruitment to DNA repair sites. Required for maintenance of chromosomal stability. Specifically binds branched DNA: binds both single-stranded DNA (ssDNA) and double-stranded DNA (dsDNA). Participates in S phase and G2 phase checkpoint activation upon DNA damage.[UniProtKB/Swiss-Prot Function]