

Product datasheet for **RG226673**

C4orf52 (SMIM20) (NM_001145432) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Tag: TurboGFP

Symbol: C4orf52

Synonyms: C4orf52; MITRAC7; PNX

Mammalian Cell Selection: Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG226673 representing NM_001145432
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCCGGAACCTGCGCACCGCGCTCATTTTCGGCGGCTTCATCTCCCTGATCGGCGCCGCTTCTATC
CCATCTACTTCGGCCCTAATGAGATTGGAGGAGTACAAGAAGGAACAAGCTATAAATCGGGCTGGAAT
TGTTCAAGAGGATGTGCAGCCACCAGGGTTAAAAGTGTGGTCTGATCCATTTGGCAGGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG226673 representing NM_001145432
Red=Cloning site Green=Tags(s)

MSRNLRTALIFGGFISLIGAAFYPIYFRPLMRLEEKKEQAINRAGIVQEDVQPPGLKVWSDPFGRK

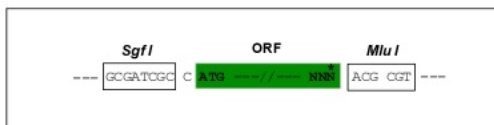
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:

Cloning sites used for ORF Shuttling:



EcoR I
BamH I *Kpn I*
RBS
Kozac Consensus
Sgf I
Asc I

CTATAGGGCGGCCGGGAATTCTGCTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCATCGCCGGCGCCGCAGATCT

Hind III
Nhe I
Rsr II
Mlu I
Not I
Xho I
GFP Tag

CAAGCTTAAC TAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG ACG GAC ---
 T R T R P L E M E S D - - -

Pme I
Fse I

--- --- GAA GAA AGA GTT TAA ACGCGCGCCGCGGAGCT
 - - - E E R V Stop

ACCN: NM_001145432

ORF Size: 201 bp

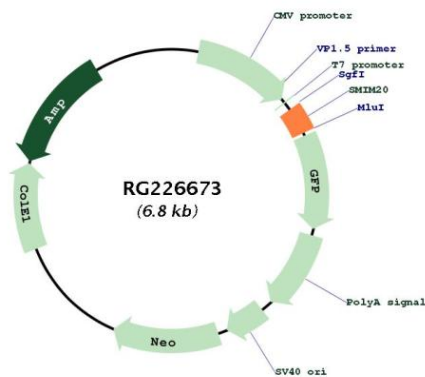
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<u>NM_001145432.1, NP_001138904.1</u>
RefSeq Size:	1021 bp
RefSeq ORF:	204 bp
Locus ID:	389203
UniProt ID:	<u>Q8N5G0</u>
Cytogenetics:	4p15.2
Gene Summary:	Component of the MITRAC (mitochondrial translation regulation assembly intermediate of cytochrome c oxidase complex) complex, that regulates cytochrome c oxidase assembly. Promotes the progression of complex assembly after the association of MT-CO1/COX1 with COX4I1 and COX6C. Chaperone-like assembly factor required to stabilize newly synthesized MT-CO1/COX1 and to prevent its premature turnover.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG226673