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Product datasheet for RG202901

WFS1 (NM_006005) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	WFS1 (NM_006005) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	WFS1
Synonyms:	CTRCT41; WFRS; WFS; WFSL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG202901 representing NM_006005
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACTCCAACACTGCTCCGCTGGGCCCCTCCTGCCCACAGCCCCCGCCAGCACCGCAGCCCCAGGCGC
GTTCCCGACTCAATGCCACAGCCTCGTTGGAGCAGGAGAGGAGCGAAAGGCCCCGAGCACCCGGACCCCA
GGCTGGCCCTGGCCCTGGTGTTAGAGACGCAGCGGCCCCCGCTGAACCCCAGGCCCAGCATACCAGGAGC
CGGGAAAGAGCAGACGGCACCGGGCCTACAAAGGGAGACATGGAAATCCCCTTTGAAGAAGTCCTGGAGA
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GCTGTGAAGCTGCTTCGCCGGTGCTTGGCGGACAGAAGAGGCATCACGTCCGAGAACGAACGGGAGGTGA
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TCAGCAGCGAGTCCAAGAACTACATCGCGCTGGATGACTTTGTGGAGATCACTAAGAAGTACGCCAAGGG
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GACCTGCCACTGCGTCTGAAGGTGGTCAAGTACCCCCTGCACGCCATCATGGAGATCAAGGAGTACCTGA
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AGCACGACTGGCGCAGCACCGTGCATGGCGCCGTGAAGTTCGCCTTCGACTTCTTTTTCTTCCCATTCCT
GTCGGCGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG202901 representing NM_006005
Red=Cloning site Green=Tags(s)

MDSNTAPLGPSCPQPPPAPQPQARSRLNATASLEQERSERPRAPGPQAGPGPGVRDAAAPAEPQAQHTRS
RERADGTGPTKGDMEIPFEEVLERAKAGDPKAQTEVGKHYLQLAGDTDEELNSCTAVDWLVLAAKQGRRE
AVKLLRRCLADRRGITSENEREVRQLSSETDLERAVRKAALVMYWKLNPKKKKQVAVAELLENVGQVNEH
DGGAQPGPVPKSLQKQRRMLERLVSSESKNYIALDDFVEITKKYAKGVIPSSLFLQDDEDDDELAGKSPE
DLPLRLKVVKYPLHAIMEIKEYLIDMASRAGMHWLSTIIPTHHINALIFFFIVSNLTIDFFAFFIPLVIF
YLSFISMVICTLKVFQDSKAWENFRTLTDLLLRFEPNLDVEQAEVNFGWNHLEPYAHFLLSVFFVIFSFP
IASKDCIPCSELAVITGFFTVTSYLSLSTHAEPYTRRALATEVTAGLLSLLPSMPLNWPYLKVLGQTFIT
VPVGHLVVLNVSVPCLLYVYLLYLFFRMAQLRNFKGTYCYLVPYLVCFMWCELSVVILLESTGLGLLRAS
IGYFLFLFALPILVAGLALVGVLQFARWFTSLELTKIAVTVAVCSVPLLLRWWTKASFSVVGMVKSLTRS
SMVKLILVWLTAIVLFCWFYVYRSEGMKVYNSTLTWQQYGALCGPRAWKETNMARTQILCSHLEGHRVTW
TGRFKYVRVTDIDNSAESAINMLPFFIGDWMRCLYGEAYPACSPGNTSTAEEELCRLKLLAKHPCHIKKF
DRYKFEITVGMPFSSGADGSRSREEDDVTKDIVLRASSEFKSVLLSLRQGSLIEFSTILEGRLGSKWPVF
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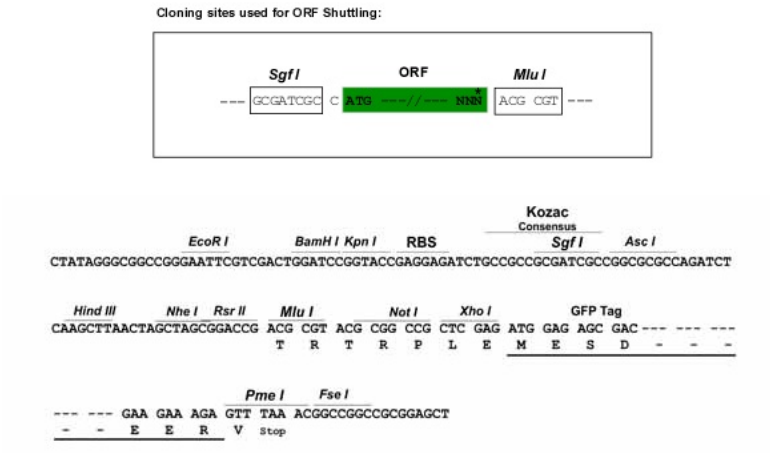
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

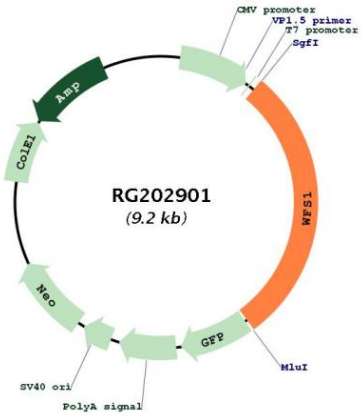
Cloning Scheme:



ACCN:	NM_006005
ORF Size:	2670 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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_006005.3
RefSeq Size:	3640 bp
RefSeq ORF:	2673 bp
Locus ID:	7466
UniProt ID:	O76024
Cytogenetics:	4p16.1
Protein Families:	Druggable Genome, Transmembrane

Gene Summary: This gene encodes a transmembrane protein, which is located primarily in the endoplasmic reticulum and ubiquitously expressed with highest levels in brain, pancreas, heart, and insulinoma beta-cell lines. Mutations in this gene are associated with Wolfram syndrome, also called DIDMOAD (Diabetes Insipidus, Diabetes Mellitus, Optic Atrophy, and Deafness), an autosomal recessive disorder. The disease affects the brain and central nervous system. Mutations in this gene can also cause autosomal dominant deafness 6 (DFNA6), also known as DFNA14 or DFNA38. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Mar 2009]

Product images:



Circular map for RG202901