

Product datasheet for **RG211019**

CYP7A1 (NM_000780) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP7A1 (NM_000780) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CYP7A1
Synonyms:	CP7A; CYP7; CYPVII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG211019 representing NM_000780
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATGACCACATCTTTGATTTGGGGATTGCTATAGCAGCATGCTGTTGTCTATGGCTTATTCTTGAA
 TTAGGAGAAGGCAAACGGTGAACCACCTCTAGAGAATGGATTAATTCCATACCTGGGCTGTGCTCTGCA
 ATTTGGTGCCAATCCTCTTGAGTTCCTCAGAGCAAATCAAAGGAAACATGGTCATGTTTTTACCTGCAAA
 CTAATGGGAAAATATGTCCATTTTCATCACAATCCCTTGTATACCATAAGGTGTTGTGCCACGGAAAAT
 ATTTTGATTGGAAAAATTTCACTTTGCTACTTCTGCGAAGGCATTTGGGCACAGAAGCATTGACCCGAT
 GGATGGAAATACCACTGAAAACATAAACGACACTTTTCATCAAACCTGCAGGGCCATGCCTTGAATTCC
 CTCACGGAAAGCATGATGGAAAACCTCCAACGTATCATGAGACCTCCAGTCTCCTCTAACTCAAAGACCG
 CTGCCTGGGTGACAGAAGGGATGATTCTTTCTGCTACCGAGTGTGTTGAAGCTGGGTATTTAACTAT
 CTTTGGCAGAGATCTTACAAGGCGGGACACACAGAAAGCAGATATTCTAAACAATCTTGACAACCTCAAG
 CAATTCGACAAAAGTCTTTCCAGCCCTGGTAGCAGGCCTCCCATTACATGTTTCAGGACTGCGCACAAATG
 CCCGGGAGAAAAGTGGCAGAGAGCTTGAGGCACGAGAACCTCCAAAAGAGGGAAAAGCATCTCAGAAGTGT
 CAGCCTGCGCATGTTTCTCAATGACACTTTGTCCACCTTTGATGATCTGGAGAAGGCCAAGACACACCTC
 GTGGTCTCTGGGCATCGCAAGCAAACACCATTCCAGCGACTTTCTGGAGTTTATTTCAAATGATTAGGA
 ACCCAGAAGCAATGAAAGCAGCTACTGAAGAAGTAAAAGAACATTAGAGAATGCTGGTCAAAGTTCAG
 CTTGGAAGGCAATCCTATTTGTTGAGTCAAGCAGAAGTGAATGACCTGCCAGTATTAGATAGTATAATC
 AAGGAATCGCTGAGGCTTTCCAGTGCCTCCCTCAACATCCGACAGCTAAGGAGGATTTCACTTTGCACC
 TTGAGGACGGTTCTACAACATCCGAAAAGATGACATCATAGCTTTTACCCACAGTTAATGCAGTAAAG
 TCCAGAAAATCTACCCAGACCCTTTGACTTTTAAATATGATAGGTATCTTGATGAAAACGGGAAGACAAAG
 ACTACCTTCTATTGTAATGGACTCAAGTTAAAGTATTACTACATGCCCTTTGGATCGGGAGCTACAATAT
 GTCCTGGAAGATTGTTGCTATCCACGAAATCAAGCAATTTTTGATTCTGATGCTTTCTATTTTGAATT
 GGAGCTTATAGAGGGCAAGCTAAATGTCCACCTTTGGACCAGTCCCGGGCAGGCTTGGGCATTTTGCC
 CCATTGAATGATATTGAATTTAAATATAAATCAAGCATTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG211019 representing NM_000780
 Red=Cloning site Green=Tags(s)

MMTSLIWGIAIAACCLWLILGIRRRQTGEPPLENLIPYLGALQFGANPLEFLRANQRKHGHVFTCK
 LMGKYVHFITNPLSYHKVLCGKYFDWKKFHFATSAKAFGHRSIDPMDGNTTENINDTFIKTLQGHALNS
 LTESMMENLQRIMRPPVSSNSKTAAWVTEGMYFCYRVMFEAGYLTFGRDLTRRDTQKAHILNNDLNFK
 QFDKVFALVAGLPIHMFRTAHNAREKLAESLRHENLQKRESISELISLRMFLNDLSTFDLLEKAKTHL
 VVLWASQANTIPATFWSLFQMIRNPEAMKAATEEVKRTLENAGQKVSLEGNPICLSQAEIENDLPVLDSSII
 KESLRLSSASLNIRTAKEDFTLHLEDGYSYNIKDDIIALYPQLMHLDPYIYDPLTFKYDRYLDENGKTK
 TTFYCNGLKLKYYMPFGSGATICPGRFLFAIHEIKQFLILMLSYFELELIEGQAKCPPLDQSRAGLGILP
 PLNDIEFKYKFKHL

TRTRPLE - GFP Tag - V

Restriction Sites:

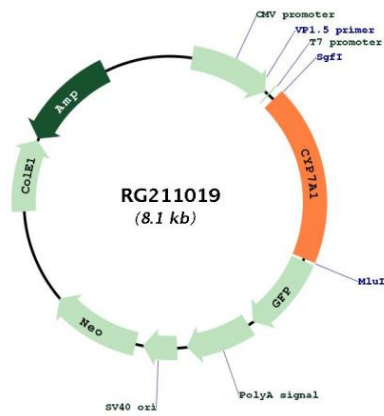
Sgfl-MluI

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, P450, Transmembrane

Protein Pathways: Metabolic pathways, PPAR signaling pathway, Primary bile acid biosynthesis

Gene Summary: This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This endoplasmic reticulum membrane protein catalyzes the first reaction in the cholesterol catabolic pathway in the liver, which converts cholesterol to bile acids. This reaction is the rate limiting step and the major site of regulation of bile acid synthesis, which is the primary mechanism for the removal of cholesterol from the body. Polymorphisms in the promoter of this gene are associated with defects in bile acid synthesis. [provided by RefSeq, Feb 2010]

Product images:



Circular map for RG211019