

Product datasheet for **RG238231**

Cytochrome P450 26B (CYP26B1) (NM_001277742) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cytochrome P450 26B (CYP26B1) (NM_001277742) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CYP26B1
Synonyms:	CYP26A2; P450RAI-2; P450RAI2; RHFC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238231 representing NM_001277742. Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTGTAGTGAACCGTCAGAAATTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**
ATGCTCTTTGAGGGCTTGGATCTGGTGTGCGCGCTGGCCACCCTCGCCGCGTGCCTGGTGTCCGTGACG
CTGCTGTGGCGGTGTGCGAGCAGCTGTGGCAGCTGCGCTGGGCCGCACTCGCGACAAGAGCTGCAAG
CTGCCCCATCCCCAAGGGATCCATGGGCTTCCGCTCATCGGAGAGACCGGCCACTGGCTGCTGCAGGTC
TTCTCCAAGATCTTCAGCCACGAGGCCCTGGAGAGTTACCTGCCAAGATCCAGCTGGTGTATCCAGGAC
ACACTGCGCGCTGGAGCAGCCACCCGAGGCCATCAACGTGTACCAGGAGGCGCAGAAGCTGACCTTC
CGCATGGCCATCCGGGTGCTGCTGGGCTTCAGCATCCCTGAGGAGGACCTTGGGCACCTCTTTGAGGTC
TACCAGCAGTTTGTGGACAATGTCTTCTCCCTGCCTGTCGACCTGCCCTTCAGTGGCTACCGCGGGGC
ATTCAGGCTCGGCAGATCCTGCAGAAGGGGCTGGAGAAGGCCATCCGGGAGAAGCTGCAGTGCACACAG
GGCAAGGACTACTTGGACGCCCTGGACCTCCTCATTGAGAGCAGCAAGGAGCAGCGGAAGGAGATGACC
ATGCAGGAGCTGAAGGACGGGACCCTGGAGCTGATCTTTGCGGCTATGCCACCACGGCCAGCGCCAGC
ACCTCACTCATCATGCAGCTGCTGAAGCACCCCACTGTGCTGGAGAAGCTGCGGGATGAGCTGCGGGCT
CATGGCATCCTGCACAGTGGCGGCTGCCCTGCGAGGGCACACTGCGCCTGGACACGCTCAGTGGGCTG
CGCTACCTGGACTGCGTCATCAAGGAGGTATGCGCCTGTTACGCCCCATTTCGGCGGCTACCGCACT
GTGCTGCAGACCTTCGAGCTTGATGGTTTCCAGATCCCCAAAGGCTGGAGTGTATATAGCATCCGG
GACACCCATGACACAGCGCCCGTGTCAAAGACGTGAACGTGTTGACCCCGATCGCTTCAGCCAGGCG
CGGAGCGAGGACAAGGATGGCCGCTTCCATTACCTCCCGTTCCGGTGGCGGTGTCCGGACCTGCCTGGGC
AAGCACCTGGCAAGCTGTTCTGAAGGTGCTGGCGGTGGAGCTGGCTAGCACCAGCCGCTTTGAGCTG
GCCACACGGACCTTCCCCGCATCACCTTGGTCCCGCTCCTGCACCCGTTGGATGGCCTCAGCGTCAAG
TTCTTTGGCTGGACTCCAACGAGACGATCCTGCCGAGACGGAGGCCATGCTGAGCGCCACAGTC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC



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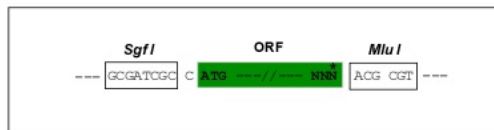
Protein Sequence: >Peptide sequence encoded by RG238231
Blue=ORF Red=Cloning site Green=Tag(s)

MLFEGLDLVSALATLAACLVSVTLLLAQSQQWLQRLWAATRDKSCKLPIPKGSMGFPLIGETGHWLLQV
FSKIFSHEALESYLPKIQLVIQDTLRAWSSHPEAINVYQEAQKLTFMAIRVLLGFSPPEEDLGHLEFV
YQQFVDNVFSLPVDLPFSGYRRGIQARQILQKGLEKAIREKLQCTQKDYLDALDLLIESKEHGKEMT
MQELKDGTELEIFAAYATTASASTSLIMQLLKHPTVLEKLRDELRAHGILHSGGCPCEGTLRLDTLSGL
RYLDCVIKEVMRLFTPIISGGYRTVLQTFELDGFQIPKGWSVMYSIRDTHDTAPVFKDNNVDFDPDRFSQA
RSEDKDGRFHYLPFGGGVRTCLGKHLAKLFLKVLAVELASTSRFELATRTFPRITLVPVLHPVDGLSVK
FFGLDSNQNEILPETEAMLSATV
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPGYPNPFLLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTSLRDGGYSSVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



CTATAGGGCGCGCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGCCGCCAGATCT

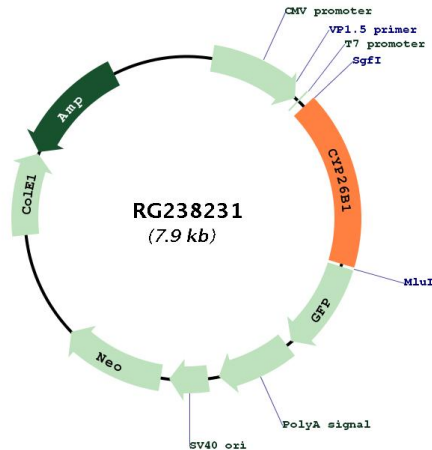
EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGCTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

--- --- GAA GAA AGA GTT TAA ACGGCCGCCGCCGAGCT

- - E E R V Stop

Plasmid Map:


ACCN: NM_001277742

ORF Size: 1311 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).

RefSeq: [NM_001277742.1](#), [NP_001264671.1](#)

RefSeq Size: 4342 bp

RefSeq ORF: 1314 bp

Locus ID: 56603

UniProt ID: [Q9NR63](#)

Cytogenetics: 2p13.2

Protein Families: Druggable Genome, P450

Protein Pathways: Retinol metabolism

MW: 49.5 kDa

Gene Summary:

This gene encodes a member of the cytochrome P450 superfamily. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. The encoded protein is localized to the endoplasmic reticulum, and functions as a critical regulator of all-trans retinoic acid levels by the specific inactivation of all-trans retinoic acid to hydroxylated forms. Mutations in this gene are associated with radiohumeral fusions and other skeletal and craniofacial anomalies, and increased levels of the encoded protein are associated with atherosclerotic lesions. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2013]