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Product datasheet for SC331473

Cytochrome P450 3A4 (CYP3A4) (NM_001202855) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cytochrome P450 3A4 (CYP3A4) (NM_001202855) Human Untagged Clone

Tag: Tag Free

Symbol: Cytochrome P450 3A4

Synonyms: CP33; CP34; CYP3A; CYP3A3; CYPIIIA3; CYPIIIA4; HLP; NF-25; P450C3; P450PCN1; VDDR3

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF:

>SC331473 representing NM_001202855.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGGCTCTCATCCCAGACTTGGCCATGGAAACCTGGCTTCTCCTGGCTGTCAGCCTGGTGCTCCTCTAT
CTATATGGAACCCATTCACATGGACTTTTTAAGAAGCTTGGAATTCCAGGGCCCACACCTCTGCCTTTT
TTGGGAAATATTTTGTCCTACCATAAGGGCTTTTGTATGTTTGACATGGAATGTCATAAAAAGTATGGA
AAAGTGTGGGGCTTTTATGATGGTCAACAGCCTGTGCTGGCTATCACAGATCCTGACATGATCAAAACA
GTGCTAGTGAAAGAATGTTATTCTGTCTTCACAAACCGGAGGCCTTTTGGTCCAGTGGGATTTATGAAA
AGTGCCATCTCTATAGCTGAGGATGAAGAATGGAAGAGATTACGATCATTGCTGTCTCCAACCTTCACC
AGTGGAAAACTCAAGGAGATGGTCCCTATCATTGCCCAGTATGGAGATGTGTTGGTGAGAAATCTGAGG
CGGGAAGCAGAGACAGGCAAGCCTGTCACCTTGAAAGACGTCTTTGGGGCCTACAGCATGGATGTGATC
ACTAGCACATCATTTGGAGTGAACATCGACTCTCTCAACAATCCACAAGACCCCTTTGTGGAAAACACC
AAGAAGCTTTTAAGATTTGATTTTTTGGATCCATTCTTTCTCTCAATAATCTTTCCATTCCTCATCCCA
ATTCTTGAAGTATTAAATATCTGTGTGTTTCCAAGAGAAGTTACAAATTTTTTAAGAAAATCTGTAAAA
AGGATGAAAGAAAGTCGCCTCGAAGATACACAAAAGCACCGAGTGGATTTCCTTCAGCTGATGATTGAC
TCTCAGAATTCAAAAGAAACTGAGTCCCACAAAGCTCTGTCCGATCTGGAGCTCGTGGCCCAATCAATT
ATCTTTATTTTTGCTGGCTATGAAACCACGAGCAGTGTTCTCTCCTTCATTATGTATGAACTGGCCACT
CACCCTGATGTCCAGCAGAAACTGCAGGAGGAAATTGATGCAGTTTTACCCAATAAGGCACCACCCACC
TATGATACTGTGCTACAGATGGAGTATCTTGACATGGTGGTGAATGAAACGCTCAGATTATTCCCAATT
GCTATGAGACTTGAGAGGGTCTGCAAAAAAGATGTTGAGATCAATGGGATGTTCATTCCCAAAGGGGTG
GTGGTGATGATTCCAAGCTATGCTCTTCACCGTGACCCAAAGTACTGGACAGAGCCTGAGAAGTTCCTC
CCTGAAAGATTCAGCAAGAAGAACAAGGACAACATAGATCCTTACATATACACACCCTTTGGAAGTGGA
CCCAGAAACTGCATTGGCATGAGGTTTGCTCTCATGAACATGAAACTTGCTCTAATCAGAGTCCTTCAG
AACTTCTCCTTCAAACCTTGTAAAGAAACACAGATCCCCCTGAAATTAAGCTTAGGAGGACTTCTTCAA
CCAGAAAAACCCGTTGTTCTAAAGGTTGAGTCAAGGGATGGCACCGTAAGTGGAGCCTGA

Restriction Sites: SgfI-MluI

ACCN: NM_001202855

Insert Size: 1509 bp

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OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_001202855.2
RefSeq Size:	2789 bp
RefSeq ORF:	1509 bp
Locus ID:	1576
UniProt ID:	P08684
Cytogenetics:	7q22.1
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, P450, Transmembrane
Protein Pathways:	Drug metabolism - cytochrome P450, Drug metabolism - other enzymes, Linoleic acid metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Retinol metabolism
MW:	57.3 kDa

Gene Summary: This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases that catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and its expression is induced by glucocorticoids and some pharmacological agents. This enzyme is involved in the metabolism of approximately half the drugs in use today, including acetaminophen, codeine, cyclosporin A, diazepam, erythromycin, and chloroquine. The enzyme also metabolizes some steroids and carcinogens. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. Previously another CYP3A gene, CYP3A3, was thought to exist; however, it is now thought that this sequence represents a transcript variant of CYP3A4. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2020]
Transcript Variant: This variant (2) uses an alternate splice site in the CDS compared to variant 1. The resulting isoform (2) is shorter but has the same N- and C-termini compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.