

Supplemental Table S1: Primers used for full-length cDNA isolation, qRT-PCR and pESC-Leu2d modification

Full-length cDNA Isolation

Target Gene	Orientation	Sequence in 5'-3' direction
CYP76AA20	fwd	ATGGAAAGCCATCTGTTCTACTGCTAT
CYP76AA20	rev	CTAATATATGTGATGTTGAGGCGTGGTG
CYP76AA21	fwd	ATGGAAAGCTATTATGCCCATCTTTG
CYP76AA21	rev	CTAATATATGTTATGTGGCAGGCCTG
CYP76AA22	fwd	ATGGAAATTCACAACTTCTGGTATTCTGTC
CYP76AA22	rev	CTAGTATAAGATGATGCGGCAGACGTGGCA
CYP76AA23	fwd	GTACTGAGATGGATTTCAGAACATTTCTGGT
CYP76AA23	rev	TTAGTACAAGTTATGTGGGAGGCCTGGTATGGCA
CYP76AA24	fwd	ATGGATAAGCAACCGGTGTTCTGGTTCTGt
CYP76AA24	rev	CTAATACATGTTATGTAGCAGGCGTGGTGGGA
CYP76AA25	fwd	ATGGAGACTCCACCCTTCTGGTAC
CYP76AA25	rev	CTAGTATAAGATGATGCGGTAGACGTGGCATC
CYP76AA26	fwd	ATGCAGATTGATTCAATCACATTGCTTCATC
CYP76AA26	rev	CTAACACATTCAAACGCACCATGCTGTGAA
CYP76Z2	fwd	GTCATGGATTCAATCAATTGCTTCATC
CYP76Z2	rev	CTAAAACTTGATGACATTCTGTGTTAGG
CYP750B1	fwd	TCGTTGCATAGAAATGGATCTCAATATGAGC
CYP750B1	rev	CTAAATTAAAGGTTAAAGGTTATTCCCTTAACCTC

qRT-PCR

Target Gene	Orientation	Sequence in 5'-3' direction
CYP76AA25	fwd	CGAAGACTTCACTGTCGTTGA
CYP76AA25	rev	TCGTTCGGTACCTGCAATA
CYP750B1	fwd	GCGTTCCTGCAATAGGACTC
CYP750B1	rev	GAAGAGCTCCAAGTGC
(+)-Sabinen Synthase	fwd	AAATGAAATTGCCAAGCAC
(+)-Sabinen Synthase	rev	TCTGTTCAGGCGAAGGATT
Ef_alpha	fwd	GCAGCTTCTCTCAAAACG
Ef_alpha	rev	CATTGGCCATGTTGACTCTG
Actin	fwd	GGAGGAACTGGTCTGCTT
Actin	rev	CCACTACTGCTGAGCGTGA
GADPH	fwd	ATTGGAGACAGCCGATCAAG
GADPH	rev	AGCCCCATTGTTGTAC
RNAPol-III	fwd	GTGGTTCTTGGAAAGACCA
RNAPol-III	rev	CCACTCCCCTAAAGCTTCCT

pESC Leu-2d modification for user cloning

Target	Orientation	Sequence in 5'-3' direction
MCSI- Δ Pacl ^a	fwd	CAATAGATTAGAGCTTGACGGGGAAAG
MCSI- Δ Pacl ^a	rev	CTGAGCTCTTAGATAACAATTCTCGCCAG
MCSII_USER-site ^b	fwd	GATCCGCTGAGGATTAATTAAAGCGGCCGCTTAATTAAACCCCTCAGCC
MCSII_USER-site ^b	rev	TCGAGGCTGAGGGTTAATTAAAGCGGCCGCTTAATTAAATCCTCAGCG

^a cloning was achieved using NgoMVI and MCSI SacI site

^b oligos contained 5' phosphorylation and were cloned after annealing into BamHI and HindIII site of MCSII

P450 User cloning

Target	Orientation	Sequence in 5'-3' direction
CYP76AA20_User	fwd	GGATTAUAUATGGAAAGCCATCTGTTCTAC
CYP76AA20_User	rev	GGGTAAUUCTAATATATGTGATGTTGTAGCGT
CYP76AA21_User	fwd	GGATTAUAUATGGAAAGCTATTATGCCATC
CYP76AA21_User	rev	GGGTAAUUCTAATATATGTTATGTGGCAGGC
CYP76AA22_User	fwd	GGATTAUAUATGGAAATTCCACAACCTTCTG
CYP76AA22_User	rev	GGGTAAUUCTAGTATAGATGATGCGGCAG
CYP76AA23_User	fwd	GGATTAUAUATGGATTTCAGAACATTTCTG
CYP76AA23_User	rev	GGGTAAUUTTAGTACAAGTTATGTGGGAG
CYP76AA24_User	fwd	GGATTAUAUATGGATAAGCAACCGGTGTT
CYP76AA24_User	rev	GGGTAAUUCTAATACATGTTATGTAGCAGCGT
CYP76AA25_User	fwd	GGATTAUAUATGGAGACTCCACCGCTTC
CYP76AA25_User	rev	GGGTAAUUCTAGTATAGATGATGCGGTAGAC
CYP76AA26_User	fwd	GGATTAUAUATGATCTTGTATGGAACTGTG
CYP76AA26_User	rev	GGGTAAUGTGGGTACCCCTAGTATATATG
CYP76Z2_User	fwd	GGATTAUAUATGGATTCAATCAATTGCTTC
CYP76Z2_User	rev	GGGTAAUUCTAAAATGATGACATTCTT
CYP750B1_User	fwd	GGATTAUAUATGGATCTCAATATGAGCGT
CYP750B1_User	rev	GGGTAAUUCTAAATTAAAGGTTAAAGGTT