

Supplemental Tables

Table S1. Incubation conditions for assays with recombinant P450-overexpressing microsomes.

CYP Enzyme	Substrate	[Substrate] (μM) ^a	Incubation Time (min)	References
3A4	Midazolam	5	15	53
	Testosterone	25	30	53
2C9	Diclofenac	10	15	54
	Warfarin	10	30	39
2D6	Dextromethorphan	5	30	55
1A2	Phenacetin	10	30	56
2E1	Chlorzoxazone	100	15	57
2C8	Amodiaquine	2	15	13
2C19	Omeprazole	1	30	58
2B6	Bupropion	100	30	59

^a The substrate concentrations used were similar to the known K_m for each enzyme against each corresponding substrate (references listed in the left column).

Table S2. Mass spectrometry conditions for substrate and metabolite measurements.

CYP	Substrate	RT ^a (min)	Q1>Q3	Metabolite formed	RT ^a (min)	Q1>Q3
3A4	midazolam testosterone	4.30	326>291	1-hydroxymidazolam	4.53	342.2>324
		5.40	289>97	6β-hydroxytestosterone	4.70	325>269
2C9	warfarin diclofenac	5.30	309.2>163.3	7-hydroxywarfarin	5.10	325.3>179.2
		5.67	296>214	4-hydroxydiclofenac	5.22	312>266.1
2D6	dextromethorphan	4.30	272.3>147	dextrorphan	3.68	258.1>199
1A2	phenacetin	3.76	180.1>138	acetaminophen	2.06	152.06>110.16
2E1	chlorzoxazone	4.93	169.5>113	6-hydroxychlorzoxazone	3.99	185.56>130
2C8	amodiaquine	3.04	357.3>284.1	N-desethylamodiaquine	2.97	328>283
2C19	omeprazole	4.32	346>198	5-hydroxyomeprazole	4.05	362>214
2B6	bupropion	4.02	240>184	hydroxybupropion	3.91	256>139

^a RT, reaction time.

Supplemental Figure S1. Expression of V5-tagged P450s in recombinant P450-overexpressing HEK293 microsomes. Western blot analysis was performed for 25 µg microsomal protein for each P450-overexpressing HEK293 cell line using anti-V5 and anti-calnexin antibodies. V5-HRP bands indicated the expression of each V5-tagged P450 enzyme while calnexin bands served as the loading control for microsomal protein samples. No V5 tag was detected in microsomes from parental HEK293 cells.