

SUPPLEMENTARY INFORMATION

Table S1. P450 inhibition results for seven methylindole (MI) analogs for major CYP isoforms. The two CYP3A probes were testosterone (T) and midazolam (M).

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Compound	CYP1A2	CYP2C9	CYP2C19	CYP2D6	CYP3A (T)	CYP3A (M)
1MI	>20	>20	>20	>20	4.8	3.3
2MI	>20	>20	>20	>20	>20	>20
3MI	>20	>20	>20	>20	>20	>20
4MI	>20	>20	>20	>20	>20	>20
5MI	>20	>20	>20	>20	>20	>20
6MI	>20	>20	>20	>20	>20	>20
7MI	>20	>20	>20	>20	>20	>20

Table S2. Time-dependent inhibition IC₅₀ (μM) and AUC shift for seven methylindole (MI) analogs. The assay's positive results are with AUC shift of greater than 15% with or without NADPH preincubation for 30 min.

Compound	P450 TDI IC ₅₀ in μM (% change in AUC)					
	CYP1A2	CYP2C9	CYP2C19	CYP2D6	CYP3A-M	CYP3A-T
1MI	N	N	N	N	0.63 (28)	1.76 (38)
2MI	N	N	N	N	N	N
3MI	N	N	N	N	N	N
4MI	N	N	N	N	N	7.23 (21)
5MI	N	N	N	N	>10.0 (22)	5.40 (15)
6MI	N	N	N	N	>10 (33)	2.06 (34)
7MI	>10 (15)	N	>10 (16)	7.42 (26)	>10 (23)	6.60 (32)

5 N = no time-dependent inhibition with an IC₅₀ greater than 10 μM and an AUC change of less than 15%.

Table S3.

Analyte	RT (min)	Conjugate [M+H] ⁺	Modification	Fragmentation (m/z)
1MI	4.37	322.0863	+O-2H+GSH-Glu	304.0763, 258.0884, 203.0645
2MI	4.32	453.1443	+O+GS	435.1338, 378.1126, 324.1026, 178.0327
3MI	4.97	453.1445	+O+GS	435.1350, 378.1134, 324.1025, 274.1047, 146.0602
	5.17 (A)	437.1495	+GS	308.0922, , 179.0489, 130.0648
	5.87 (B)	437.1495	+GS	362.1185, 308.1076, 274.1042
4MI	3.94	338.0814	+2O-2H+GS-Glu	320.0712, 274.0834, 219.0596
	4.28	453.1443	+O+GS	324.1020, 308.0923, , 179.0488
	5.00	322.0861	+O-2H+GS-Glu	304.0759, 258.0882, 229.0434, 203.0643
5MI	4.38	322.0863	+O-2H+GS-Glu	304.0762, 270.0869, 258.0883, 229.0437, 219.0788, 203.0645
6MI	3.40	338.0813	+2O-2H+GS-Glu	320.0709, 274.0831, 219.0592,
	3.83	338.0811	+2O-2H+GS-Glu	320.0710, 274.0832, 235.0549, 219.0594,
	5.14	322.0862	+O-2H+GS-Glu	258.0884, 229.0441, 219.0767, , 203.0646
7MI	3.56	338.0814	+2O-2H+GS-Glu	320.0709, 274.0830, 219.0594, ,
	4.94	322.0861	+O-2H+GS-Glu	304.0760, 258.0880, 229.0433, 203.0643,