

Elucidation of drug-like properties in metabolites of *Curcuma angustifolia* Roxb.

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Received 26 November 2022; revised received 07 February 2023; accepted 17 February 2023

Supplementary Data

Supplementary Table — Physicochemical/drug likeness properties of the compounds (with highest concentration) identified from *C. angustifolia* Roxb.

Drug likeness	Metabolites					
	9,12-octadecadienoic acid	5-Hydroxymethyl furfural	n-Hexadecanoic acid	Terpineol	Cis-vaccenic acid	Coronarin E
Canonical SMILES	<chem>CCCCC=CCC=CCC CCCCC(=O)O</chem>	<chem>OCc1ccc(o1)C=O</chem>	<chem>CCCCCCCCC CCCCC(=O)O</chem>	<chem>CC1=CCC(CC1)C (O)(C)C</chem>	<chem>CCCCCCC=CCCC CCCCC(=O)O</chem>	<chem>C=C1CCC2 C(C1C=Cc1cocc1) (C)CCCC2(C)C</chem>
Formula	C ₁₈ H ₃₂ O ₂	C ₆ H ₆ O ₃	C ₁₆ H ₃₂ O ₂	C ₁₀ H ₁₈ O	C ₁₈ H ₃₄ O ₂	C ₂₀ H ₂₈ O
MW	280.45	126.11	256.42	154.25	282.46	284.44
Heavy atoms	20	9	18	11	20	21
Aromatic heavy atoms	0	5	0	0	0	5
Fraction Csp ³	0.72	0.17	0.94	0.8	0.83	0.6
Rotatable bonds	14	2	14	1	15	2
H-bond acceptors	2	3	2	1	2	1
H-bond donors	1	1	1	1	1	0
MR	89.46	30.22	80.8	48.8	89.94	90.87
TPSA	37.3	50.44	37.3	20.23	37.3	13.14
iLOGP	4.14	0.91	3.85	2.51	4.12	3.85
XLOGP ₃	6.98	-0.58	7.17	3.39	7.64	6.19
WLOGP	5.88	0.43	5.55	2.5	6.11	5.98
MLOGP	4.47	-1.06	4.19	2.3	4.57	4.52
Silicos-IT Log P	5.77	1.24	5.25	2.17	5.95	5.54

(Contd.)

Supplementary Table — Physicochemical/drug likeness properties of the compounds (with highest concentration) identified from <i>C. angustifolia</i> Roxb. (Contd.)						
Drug likeness	Metabolites					
	9,12-octadecadienoic acid	5-Hydroxymethyl furfural	n-Hexadecanoic acid	Terpineol	Cis-vaccenic acid	Coronarin E
Canonical SMILES	<chem>CCCCC=CCC=CCC CCCCC(=O)O</chem>	<chem>OCc1ccc(o1)C=O</chem>	<chem>CCCCCCCCC CCCCC(=O)O</chem>	<chem>CC1=CCC(CC1)C (O)(C)C</chem>	<chem>CCCCC=CCCC CCCCC(=O)O</chem>	<chem>C=C1CCC2 C(C1C=Cc1ccc1) (C)CCCC2(C)C</chem>
Consensus Log P	5.45	0.19	5.2	2.58	5.68	5.22
ESOL Log S	-5.05	-0.54	-5.02	-2.87	-5.41	-5.55
ESOL Solubility (mg/mL)	2.49E-03	3.67E+01	2.43E-03	2.10E-01	1.09E-03	8.06E-04
ESOL Solubility (mol/l)	8.87E-06	2.91E-01	9.49E-06	1.36E-03	3.85E-06	2.84E-06
ESOL Class	Moderately soluble	Very soluble	Moderately soluble	Soluble	Moderately soluble	Moderately soluble
Ali Log S	-7.58	-0.01	-7.77	-3.49	-8.26	-6.25
Ali Solubility (mg/mL)	7.42E-06	1.24E+02	4.31E-06	4.95E-02	1.54E-06	1.60E-04
Ali Solubility (mol/l)	2.64E-08	9.80E-01	1.68E-08	3.21E-04	5.46E-09	5.62E-07
Ali Class	Poorly soluble	Very soluble	Poorly soluble	Soluble	Poorly soluble	Poorly soluble
Silicos-IT LogSw	-4.67	-1.35	-5.31	-1.69	-5.39	-5.54
Silicos-IT Solubility (mg/mL)	5.93E-03	5.67E+00	1.25E-03	3.17E+00	1.14E-03	8.26E-04
Silicos-IT Solubility (mol/l)	2.11E-05	4.50E-02	4.88E-06	2.06E-02	4.04E-06	2.90E-06
Silicos-IT class	Moderately soluble	Soluble	Moderately soluble	Soluble	Moderately soluble	Moderately soluble
GI absorption	High	High	High	High	High	Low
BBB permeant	Yes	No	Yes	Yes	No	No
Pgp substrate	No	No	No	No	No	No
CYP1A2 inhibitor	Yes	No	Yes	No	Yes	No
CYP2C19 inhibitor	No	No	No	No	No	Yes
CYP2C9 inhibitor	Yes	No	Yes	No	Yes	Yes
CYP2D6 inhibitor	No	No	No	No	No	No
CYP3A4 inhibitor	No	No	No	No	No	No
log Kp (cm/s)	-3.05	-7.48	-2.77	-4.83	-2.6	-3.64
Lipinski violations	1	0	1	0	1	1
Ghose violations	1	3	0	1	1	1
Veber violations	1	0	1	0	1	0
Egan violations	1	0	0	0	1	1
Muegge violations	1	1	1	2	1	2
Bioavailability Score	0.85	0.55	0.85	0.55	0.85	0.55
PAINS alerts	0	0	0	0	0	0
Brenk alerts	1	1	0	1	1	1
Leadlikeness #violations	2	1	2	1	2	1
Synthetic Accessibility	3.1	2.25	2.31	3.24	3.07	4.85