Anal Bioanal Chem (2012) 404:619–621
DOI 10.1007/s00216-012-6109-1

ERRATUM

Erratum to: Selective detection of alkaloids in MALDI-TOF: the introduction of a novel matrix molecule

Andreas Schinkovitz · Ghislain Tsague Kenfack · Denis Seraphin · Eric Levillain · Maryléne Dias · Pascal Richomme

Received: 10 May 2012 / Accepted: 10 May 2012 / Published online: 3 June 2012

Erratum to: Anal Bioanal Chem
DOI 10.1007/s00216-012-5958-y

The authors would like to call readers' attention to the fact that in the published article the molecular formulas in Table 1 were wrongly assigned to the compound's names. Please find the correct Table 1 below:

The online version of the original article can be found at http://dx.doi.org/10.1007/s00216-012-5958-y.

A. Schinkovitz (✉) · G. T. Kenfack · D. Seraphin · P. Richomme
UFR des Sciences Pharmaceutiques,
Université d'Angers-Laboratoire SONAS,
16 Boulevard Daviers,
49045 Angers, Cedex 01, France
e-mail: pharm@gmx.at

E. Levillain · M. Dias
Laboratoire CIMA, Université d'Angers-CNRS,
2 Boulevard Lavoisier,
49045 Angers, Cedex, France

A. Schinkovitz
Department of Pharmacognosy, University of Vienna,
Althahnstraße 14,
1090 Vienna, Austria

Table 1 Fifty-five compounds evaluated by MALDI-TOF using five different matrix molecules

Compound	MT3P	STD_{MT3P}	DIT	STD_{DIT}	CHCA	STD_{CHCA}	TER	STD_{TER}	DHB	STD_{DHB}	MF	MT3P vs. CHCA	Mode
Acetylsalicylic acid	nd		nd		nd		nd		nd		$C_9H_8O_4$		LN10
Aconitine[a]	14.00	4.86	0.22	0.09	3.90	1.17	0.48	0.21	nd		$C_{34}H_{47}NO_{11}$	Yes P=0.002	LP10
Amentoflavone	17.68	3.76	0.25	0.10	14.24	7.44	0.18	0.03	nd		$C_{30}H_{18}O_{10}$	No P=0.589	LP10
Angiotensin II	nd		nd		10.85	4.49	nd		nd			Yes P=0.002	LP10
Atropine[a]	18.61	5.24	0.04	0.03	9.67	2.72	0.02	0.01	nd		$C_{17}H_{23}NO_3$	Yes P=0.009	LP10
Aucuparin	nd		nd		nd		nd		nd		$C_{14}H_{14}O_3$		LP10
β-Carotene	0.24	0.16	0.01	0.00	0.15	0.05	0.69	0.27	nd		$C_{40}H_{56}$	No P=0.198	LP10
Benzocaine	nd		nd		1.51	0.46	nd		nd		$C_9H_{11}NO_2$	Yes P=0.002	LP10
Berberine[a]	23.56	5.67	0.34	0.16	18.75	4.48	6.16	5.49	0.01	0.01	$C_{20}H_{18}NO_4$	No P=0.134	LP10
Bergapten	0.07	0.02	nd		8.72	3.88	nd		nd		$C_{12}H_8O_4$	Yes P=0.002	LP10
Boldine[a]	11.22	4.32	0.20	0.24	7.94	5.25	0.36	0.30	nd		$C_{19}H_{21}NO_4$	No P=0.265	LP10
Caffeic acid	2.48	2.30	nd		nd		1.30	0.79	nd		$C_9H_8O_4$	Yes P=0.002	LN10
Caryophyllene	nd		nd		nd		nd		nd		$C_{15}H_{24}$		LP15
Chlorogenic acid	nd		nd		0.02	0.02	nd		nd		$C_{16}H_{18}O_9$	Yes P=0.015	LN10
Cholesterol	nd		nd		nd		nd		nd		$C_{27}H_{46}O$		LP10
Claviculine[a]	20.43	4.75	0.19	0.11	6.51	1.85	1.74	2.74	nd		$C_{18}H_{19}NO_4$	Yes P=0.002	LP10
Codeine[a]	12.07	3.59	0.12	0.08	16.58	3.62	0.65	0.40	nd		$C_{18}H_{21}NO_3$	No P=0.056	LP10
Colchicine[a]	12.11	3.77	0.45	0.21	2.98	1.39	0.12	0.07	nd		$C_{22}H_{25}NO_6$	Yes P<0.001	LP10
Coumarin	nd		nd		1.12	0.36	nd		nd		$C_9H_6O_2$	Yes P=0.002	LP10
Curcumin	5.41	0.43	0.29	0.15	4.77	2.65	0.05	0.06	nd		$C_{21}H_{20}O_6$	No P=0.573	LP10
Digitoxin	8.27	4.07	1.22	0.92	3.34	1.83	4.42	1.67	nd		$C_{41}H_{64}O_{13}$	Yes P=0.022	LP20
1,3-Dipalmitoylglycerol	nd		nd		nd		nd		nd		$C_{35}H_{68}O_5$		LP10
Emetine[a]	28.02	1.37	0.32	0.45	5.34	2.42	0.18	0.15	nd		$C_{29}H_{40}N_2O_4$	Yes P<0.001	LP10
E-Notopterol	nd		nd		nd		nd		nd		$C_{21}H_{22}O_5$		LP10
Fumaric acid	0.31	0.00	nd		nd		nd		nd		$C_4H_4O_4$	No P=0.065	LN10
Fumaritine[a]	25.72	2.90	0.23	0.10	2.14	2.15	1.29	1.08	nd		$C_{20}H_{21}NO_5$	Yes P<0.001	LP10
Geraniol	nd		nd		nd		nd		nd		$C_{10}H_{18}O$		LP15
Glyceryl 1,3-distearate	nd		nd		nd		nd		nd		$C_{39}H_{76}O_5$		LP10
Harmine[a]	24.68	3.42	2.39	2.43	9.34	2.83	2.57	1.16	0.01	0.00	$C_{13}H_{12}N_2O$	Yes P<0.001	LP10
Hesperidin	0.24	0.30	0.08	0.06	0.82	0.67	0.10	0.10	nd		$C_{28}H_{34}O_{15}$	Yes P<0.041	LP15
L-Hyoscyamine[a]	11.26	3.02	0.32	0.27	19.38	3.38	0.61	0.30	nd		$C_{17}H_{23}NO_3$	Yes P<0.001	LP10
Isoimperatorin	nd		nd		5.47	13.41	nd		nd		$C_{16}H_{14}O_4$	Yes P=0.002	LP10
Khellin	2.32	1.46	nd		12.95	6.56	nd		nd		$C_{14}H_{12}O_5$	Yes P=0.003	LP10
Leucine enkelphalin	nd		nd		9.10	2.82	nd		nd			Yes P=0.002	LP10
Limogine[a]	26.03	2.46	0.52	0.19	7.92	1.69	0.09	0.07	nd		$C_{20}H_{17}NO_5$	Yes P<0.001	LP10

Table 1 (continued)

Compound	MT3P	STD_{MT3P}	DIT	STD_{DIT}	CHCA	STD_{CHCA}	TER	STD_{TER}	DHB	STD_{DHB}	MF	MT3P vs. CHCA	Mode
Nicotine[a]	0.43	0.20	0.01	0.01	1.29	0.73	0.01	0.00	nd		$C_{10}H_{14}N_2$	Yes P=0.018	LP10
Pentamethoxyflavone	26.00	4.27	2.06	0.36	13.19	5.24	1.70	1.77	0.00	0.00	$C_{20}H_{20}O_7$	Yes P<0.001	LP10
Pilocarpine[a]	11.03	4.07	0.86	0.80	7.56	2.81	0.03	0.01	nd		$C_{11}H_{16}N_2O_2$	No P=0.117	LP10
Pregnolone	nd		nd		nd		nd		nd		$C_{21}H_{32}O_2$		LP10
Quercetine	0.15	0.08	0.05	0.03	14.47	3.41	0.00	0.01	nd		$C_{15}H_{10}O_7$	Yes P=0.002	LP10
Quinidine[a]	20.96	6.16	2.05	1.24	3.08	1.99	0.15	0.11	nd		$C_{20}H_{24}N_2O_2$	Yes P<0.001	LP10
Rutin	3.63	2.24	0.65	0.20	3.92	2.44	0.23	0.19	nd		$C_{27}H_{30}O_{16}$	No P=0.837	LP20
Scopolamine[a]	13.56	2.59	0.10	0.08	3.03	1.92	0.05	0.02	nd		$C_{17}H_{21}NO_4$	Yes P<0.001	LP10
Senecionine[a]	12.05	3.73	0.14	0.08	3.64	2.55	0.21	0.24	nd		$C_{18}H_{25}NO_5$	Yes P<0.001	LP10
Sitosterol	nd		nd		nd		nd		nd		$C_{29}H_{50}O$		LP10
Sparteine[a]	20.34	5.34	0.92	0.41	15.32	3.63	2.43	2.11	0.00	0.00	$C_{15}H_{26}N_2$	No P=0.086	LP10
Strychnine[a]	13.16	5.72	0.55	0.23	13.07	4.29	0.29	0.08	nd		$C_{21}H_{22}N_2O_2$	Yes P<0.001	LP10
Stylopine[a]	24.84	2.19	0.43	0.39	7.65	1.09	1.22	0.61	nd		$C_{19}H_{17}NO_4$	Yes P<0.001	LP10
Thalfoetidine[a]	5.67	1.82	0.07	0.06	3.51	1.46	1.09	0.96	nd		$C_{38}H_{42}N_2O_7$	Yes P=0.046	LP10
Thalicberin[a]	20.54	5.22	0.07	0.05	3.90	2.59	0.87	0.78	nd		$C_{37}H_{40}N_2O_6$	Yes P<0.001	LP10
Thaligosidine[a]	4.40	0.79	0.06	0.02	4.75	1.62	0.12	0.08	nd		$C_{37}H_{40}N_2O_7$	No P=0.641	LP10
Thebaine[a]	17.58	3.84	0.37	0.17	10.92	4.81	0.81	0.57	0.00	0.01	$C_{19}H_{21}NO_3$	Yes P=0.024	LP10
Theobromine[a]	0.08	0.11	nd		8.58	4.16	0.01	0.01	nd		$C_7H_8N_4O_2$	Yes P=0.002	LP10
Umbelliferone	nd		nd		nd		nd		nd		$C_{17}H_{21}NO_4$		LP10
Yohimbin[a]	16.31	4.32	0.21	0.16	6.35	3.14	1.14	1.01	nd		$C_{21}H_{26}N_2O_3$	Yes P<0.001	LP10

Originally acquired signal intensities for molecular ions were divided by 1,250 for illustration purposes. Zero numbers indicate that molecular ions were detected but at low intensity

MT3P vs. CHCA: significance (Yes/No) of observed differences between MT3P and CHCA (t test)

MF, molecular formula; LP10, linear positive mode, laser energy 10 % (15.6 μJ); LN10, linear negative mode, laser energy 10 % (15.6 μJ); nd, signal not detected

[a] Alkaloids