Supplementary Materials

Table S1. Greenness analysis of RP-HPLC method using AGREE

No.	Green Analytical Chemistry Principle	Value for Green Analytical Chemistry principle	Score
1	Direct analytical techniques should be applied to avoid sample treatment.	external sample pre- and treatment and batch analysis (reduced number of steps)	0.3
2	Minimal sample size and minimal number of samples are goals.	5 mg	1.0
3	In situ measurements should be performed.	On-line	0.66
4	Integration of analytical processes and operations saves energy and reduces the use of reagents.	3 or fewer	1.0
5	Automated and miniaturized methods should be selected.	automated and miniaturized	1.0
6	Derivatization should be avoided.	No derivatization	1.0
7	Generation of a large volume of analytical waste should be avoided and proper management of analytical waste should be provided.	24 mL	0.27
8	Multianalyte or multiparameter methods are preferred versus methods using one analyte at a time.	2 analytes in single run, 3 sample per hour	0.38
9	The use of energy should be minimized.	LC	0.5
10	Reagents obtained from renewable source should be preferred.	None of the reagents are from bio-based sources	0
11	Toxic reagents should be eliminated or replaced.	11.3 mL toxic reagents	0.19
12	The safety of the operator should be increased.	No threats which were not avoided	1.0

Table S2. Greenness analysis of RP-HPLC method using GAPI

Pentagrams	Field No.	Category	Method item	Color
First pentagram	1	Sample collection	On-line	yellow
	2	Sample preservation	None	green
	3	Sample transport	None	green
	4	Sample storage	Under normal conditions	yellow
Second pentagram	5	Type of method	Simple procedures	yellow
Third pentagram	6	Scale of extraction	Micro-extraction	yellow
	7	Solvents/reagents used	Non-green solvents/reagents used	red
	8	Additional treatments	None	green
Fourth pentagram	9	Amount of reagents or solvents	11.3 mL	yellow
	10	Health Hazard	Moderately toxic	yellow
	11	Safety hazard	Flammability score 3	yellow
Fifth pentagram	12	Energy	≤1.5 kWh per sample	yellow
	13	Occupational hazard	Hermetic sealing of analytical process	green
	14	Waste	24 mL	red
	15	Waste treatment	No treatment	red