Polygalae Radix Profiling by Online PWWE-TFC-LC-MS/MS

ACE® Ultra-inert UHPLC & HPLC Columns

Application #AN4440

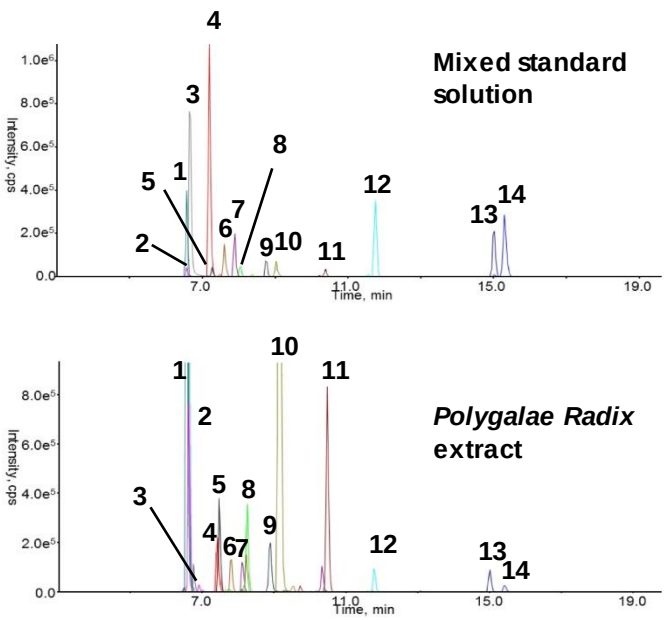
Conditions

Column:	ACE UltraCore 2.5 SuperC18
Dimensions:	100 x 2.1 mm
Part Number:	CORE-25A-1002U
Mobile Phase:	A: 0.1% formic acid in H_2O
	B: MeCN

Time (mins)	%B
0.00	0
3.00	0
3.01	20
15.00	45
15.01	0
27.00	0

Flow Rate:	0.3 mL/min
Injection:	2 µL
Detection:	Sciex 5500 Qtrap MS
	ESI in negative ion mode
	Source Temperature: 500 °C
	Capillary Voltage: -4500 kV
Sample:	*Polygalae radix* is used in Chinese medicine

PWWE – Pressurised Warm Water Extraction
TFC – Turboflow chromatography



Peak	Analyte	MRM Transitions (*m/z*)
1	Sibiricose A6	547 → 205, 583 → 547
2	Sibiricose A5	517 → 193, 517 → 175
3	Mangiferin	421 → 331, 421 → 301
4	Lancerin	405 → 257, 405 → 285
5	Polygalaxanthone VIII	567 → 447, 567 → 345
6	7-O-Methoxyl-mangiferin	435 → 345, 435 → 315
7	Polygalaxanthone IX	551 → 243, 587 → 551
8	Tenuifoliside B	667 → 461, 667 → 205
9	Polygalaxanthone VII	611 → 303, 647 →611
10	3,6'-Disinapoyl sucrose	753 → 205, 789 → 753
11	Tenuifoliside A	717 → 681, 681 → 443
12	Polygalaxanthone IV	565 → 257, 565 → 242
13	Tenuifolin	679 → 455, 679 → 425
14	6-Hydroxy-1,2,3,7-tetramethoxyxanthone	331 → 301, 331 → 316

Song Y, Song Q, Li J, Shi S. Guo L, Zhao Y, Jiang Y, Tu P. Chromatographic analysis of *Polygalae Radix* by online hyphenating pressurised liquid extraction. Sci. Rep. 6, 27303; doi:10.1038/srep27303 (2016)

© 2015 ACT Ltd. All rights reserved. All products are available worldwide.