Plant Hormones Involved in Abiotic Stresses

ACE® Ultra-inert UHPLC & HPLC Columns

Application #**AN4010**

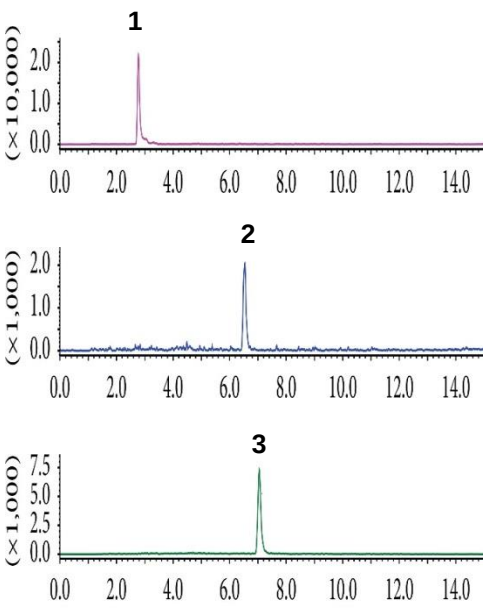
Conditions

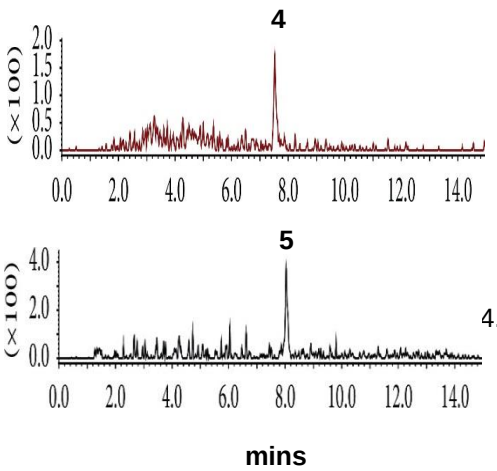
Column:	ACE UltraCore 2.5 SuperC18
Dimensions:	150 x 4.6 mm
Part Number:	CORE-25A-1546U
Mobile Phase:	A: 0.1% formic acid in H_2O B: MeCN

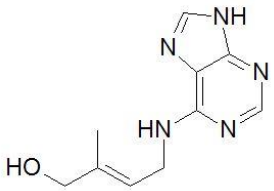
Time (mins)	%B
0	0
2	40
5	60
13	100
15	20

Flow Rate:	0.5 mL/min
Temperature:	40 °C
Detection:	Shimadzu LCMS-8040 triple quad MS ESI positive and negative mode
Sample:	Crude extract of *Arabidopsis thaliana* rosette leaves

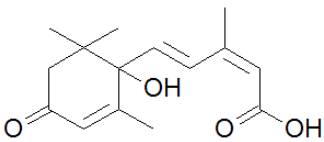
Plant hormones are involved in the regulation of response to exposure of abiotic stresses such as drought or salt



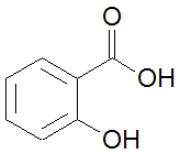




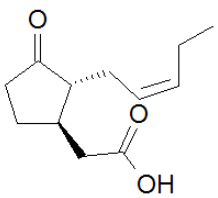
1. Zeatin (+ ESI)
(*m/z* 220 → 119)



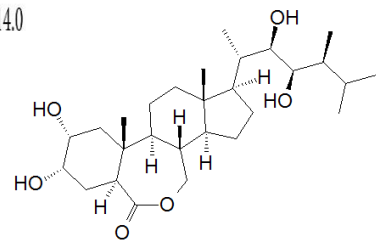
2. (±)-Abscisic acid (+ ESI)
(*m/z* 247 → 91)



3. Salicylic acid (- ESI)
(*m/z* 137 → 93)



4. (±)-Jasmonic acid (- ESI)
(*m/z* 209 → 59)



5. Brassinolide (+ ESI)
(*m/z* 481 → 95)

Kasote DM, Ghosh R, Chung JY, Kim J, Bae I, Bae H. Multiple Reaction Monitoring Mode Based Liquid Chromatography-Mass Spectrometry Method for Simultaneous Quantification of Brassinolide and other Plant Hormones Involved in Abiotic Stresses. International Journal of Analytical Chemistry (2016). http://dx.doi.org/10.1155/2016/7214087