Detection of Endogenous Steroids from Serum by UHPLC-MS/MS

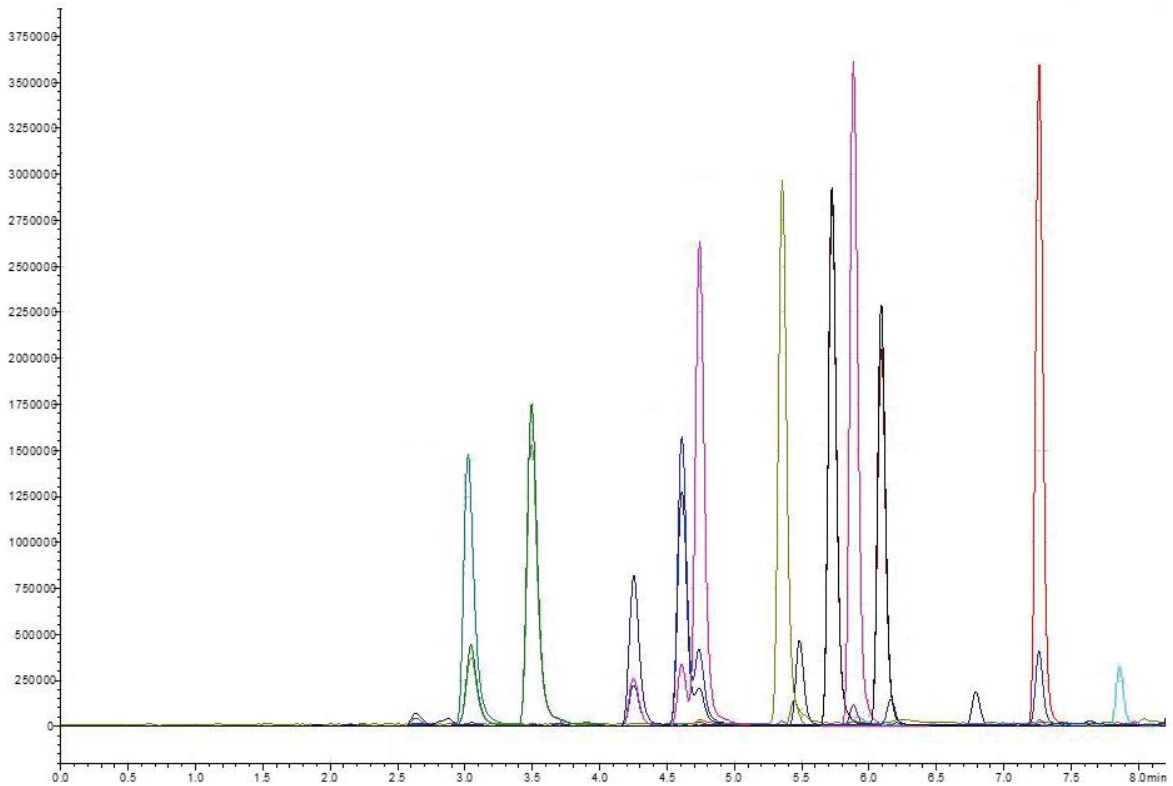
ACE®
Ultra-inert
UHPLC & HPLC Columns

Conditions

Column:	ACE Excel 1.7 C18
Dimensions:	100 x 2.1 mm
Part Number:	EXL-171-1002U
Mobile Phase:	A: 0.2 mM ammonium fluoride in water B: Methanol

Time (mins)	%B
0	50
3	60
8	90
9	95
9.1	95
9.5	50

Flow Rate:	0.4 mL/min
Injection Volume:	10 µL
Temperature:	40 °C
Detection:	Shimadzu 8060 Triple Quad MS MRM, positive and negative ESI mode
Sample:	Endogenous Steroids extracted from human serum using supported liquid extraction or polymer-based SPE prior to LC/MS-MS



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Analyte	Rt (Mins)	MRM Transitions	Ion Mode
Aldosterone-d4	2.62	363.1 → 190.3	-
Aldosterone	2.65	359.1 → 189.3	-
Cortisone	3.03	361.3 →163.2	+
18-OH-Corticosterone	3.06	363.3 → 269.2	+
Cortisol	3.51	363.4 → 121.3	+
DHEAS	3.76	367.1 → 97.1	-
21-Deoxycortisol	4.27	347.1 → 311.2	+
Corticosterone	4.63	347.3 → 329.3	+
11-Deoxycortisol	4.76	347.3 → 109.3	+
Androstenedione	5.38	287.3 → 97.2	+
Estradiol	5.47	271.1 →145.2	-
Estrone	5.51	269.2 →145.2	-
11-Deoxycorticosterone	5.75	331.3 →109.1	+
Testosterone	5.91	289.3 → 97.1	+
17-OH-Progesterone	6.11	331.3 →97.1	+
17-OH-Pregnenolone	6.18	315.3 → 297.2	+
DHEA	6.23	289.3 → 253.2	+
DHT-d3	6.80	294.4 → 258.3	+
DHT	6.82	291.3 → 255.3	+
Progesterone	7.29	315.2 → 97.2	+
Pregnenolone	7.89	299.3 → 159.3	+