



Steroid Profile

Service Code: Steroid-D4

Summary: Profile up to 24 Δ -4 steroids by LLE of blood plasma, serum, or tissue samples. Target steroid analytes are chromatographically separated on a 2.1mm x50mm Biphenyl column in a 20 min cycle. All analytes and Internal Standards are measured by ESI ionization--pos and/or neg polarity (analyte dependent) on a UHPLC-QQQ mass spectrometer using MRM methods and reported as total pG/mL (biofluids) or pM (tissues--normalized to wet tissue weight). CV's are generally 10%.

Container: cryovial

Normal Volume: 500 μ L

Minimal Volume: 50 μ L

Special Handling: If human or primate, note any known presence of infectious agents

Sample Collection: : Please see our detailed sample collection protocol on the Michigan Regional Comprehensive Metabolomics Resource Core (MRC²) website before preparing samples for analysis or contact the core director at the number below for details.

Table I: Analytes reported. Others on special request:

Analyte	Abbr.	Molecular Formula	MRM	LOQ pG/ml; pG (OC)
Aldosterone	Aldo	C ₂₁ H ₂₈ O ₅	359>189	40; 0.8
Androsterone	AN	C ₁₉ H ₃₀ O ₂	291.2>255	50; 1.0
Androstenedione	A4	C ₁₉ H ₂₆ O ₂	287.2>97.0	5; 0.1
Corticosterone	B	C ₂₁ H ₃₀ O ₄	347.2>121.0	50; 1.0
Cortisol	F	C ₂₁ H ₃₀ O ₅	363.2>121.0	100; 2.0
Cortisone	E	C ₂₁ H ₂₈ O ₅	361.2>163.0	125; 2.5
11-deoxycortisol	S	C ₂₁ H ₃₀ O ₄	347.2>97.0	50; 1.0
11-deoxycorticosterone	11-DOC	C ₂₁ H ₃₀ O ₃	331.2>97.0	18; 0.35
Estradiol	E2	C ₁₈ H ₂₄ O ₂	271.2>145.1	10; 0.2
Estrone	E1	C ₁₈ H ₂₂ O ₂	269.2>145.1	10; 0.2
17-Hydroxyprogesterone	17-OHP4	C ₂₁ H ₃₀ O ₃	331.2>97.0	13; 0.25
Progesterone	P4	C ₂₁ H ₃₀ O ₂	315.2>97.0	5; 0.1
Testosterone	T	C ₁₉ H ₂₈ O ₂	289.2>97.0	5; 0.1
Dihydrotestosterone	DHT	C ₁₉ H ₃₀ O ₂	291>255	50; 1.0
11-Hydroxyandrostenedione	11-OHA4	C ₁₉ H ₂₆ O ₃	303.2>120.9	50; 1.0
11-Hydroxyprogesterone	11-OHP4	C ₂₁ H ₃₀ O ₃	331.2>97.0	40; 0.8



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11-Hydroxytestosterone	11-OHT	C19H28O3	305.2>121.0	50; 1.0
11-Ketoandrostenedione	11-KetoA4	C19H24O3	301.2>257	50;1.0
11-Ketoprogesterone	11-KetoP4	C21H28O3	329.4>121.0	40; 0.8
11-Ketotestosterone	11-KetoT	C19H26O3	303.2>120.9	50; 1.0
16-Hydroxyprogesterone	16-OHP4	C21H30O3	331.2>109.0	13; 0.25
18-Hydroxycortisol	18-OHF	C21H30O6	379.2>267.0	25; 0.5
18-Oxocortisol	18-OxoF	C21H28O6	377.2>313.0	25; 0.5
21-Deoxycortisol	21-DeoxyF	C21H30O4	347.2>121.0	50; 1.0

***Please see our D5 Steroids panel or Sulfate Conjugate Steroids panel for other Steroid Analysis Choices**