



## Steroid Profile

**Service Code: Steroid-D5**

**Summary:** Profile up to 5  $\Delta^5$  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 as their oxime derivative by ESI ionization--pos 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  $\mu$ L

**Minimal Volume:** 50 $\mu$ 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 (MRC<sup>2</sup>) website before preparing samples for analysis or contact the core director at the number below for details.

### Table I: Analytes reported:

#### $\Delta^5$ Steroids

Analyte	Abbr.	Molecular Formula	MRM	LOQ pG/ml; pG (OC)
Pregnenolone	P5	C <sub>21</sub> H <sub>32</sub> O <sub>2</sub>	332.1>300	20; 0.5
17-hydroxypregnenolone	17OHP5	C <sub>21</sub> H <sub>32</sub> O <sub>3</sub>	348.2>330.3	50; 1.0
Allopregnenolone	Allo	C <sub>21</sub> H <sub>34</sub> O <sub>2</sub>	334.5>60.0	10; 0.2
5 $\alpha$ -pregnane-3 $\alpha$ ,17 $\alpha$ -diol-20-one ( <i>pdiol</i> )	Pdiol	C <sub>21</sub> H <sub>34</sub> O <sub>3</sub>	332.2>161.2	20; 0.5
Dehydroepiandrosterone	DHEA	C <sub>19</sub> H <sub>28</sub> O <sub>2</sub>	304>253.0	10; 0.2
5-Androstenediol	5AD			50

#### 5 $\alpha$ -Reduced steroids

Analyte	Abbr.	Molecular Formula	MRM	LOQ pG/ml; pG (OC)
Dihydrotestosterone	DHT	C <sub>19</sub> H <sub>30</sub> O <sub>2</sub>	306.2>96.0	10; 0.2
Androsterone	Andros	C <sub>19</sub> H <sub>30</sub> O <sub>2</sub>	306>288.2.0	50; 1.0

**\*Please see our D4 Steroids panel or Sulfate Conjugate Steroids panel for other Steroid Analysis Choices**