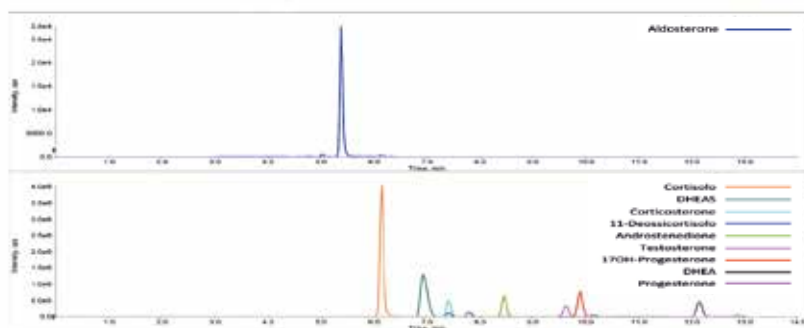


SHORT METHOD DESCRIPTION

FloMass® Steroids in Serum

Steroid hormones are lipids and originate from a common precursor: cholesterol. Transformation of cholesterol to steroid hormones has an extreme physiological importance. Steroid hormones are involved in metabolism, growth and reproduction. They are in the circulatory flow, transported by specific proteins named carriers, allowing the hormone to reach its target. Spontaneous or inherited genetic mutations that may affect the synthesis of these enzymes are responsible of the alteration of normal levels of steroid hormones. Disorders of organs involved in steroids production and regulation can also bring to a steroid pathological level. It is useful to determinate steroid hormones profile rather than individual steroid analyte.



HPLC-MS/MS system conditions

Ionization: ESI/APCI positive mode, except Aldosterone analysed in negative mode

MS/MS: specific MRM

Injection volume: 20 µl

Running time: 15 min

Column heater: 45°C

Performance

| Analyte | Linearity (ng/mL) | LLOD (ng/mL) | LLOQ (ng/mL) | CV% Intra | CV% Inter |
|--------------------|-------------------|--------------|--------------|-----------|-------------|
| Aldosterone | 0.022 - 37 | 0.007 | 0.022 | 1.0 - 6.5 | 0.6 - 10.1 |
| Androstenedione | 0.005 - 53 | 0.001 | 0.005 | 1.3 - 2.4 | 0.8 - 9.3 |
| Corticosterone | 0.024 - 225 | 0.007 | 0.024 | 0.3 - 4.4 | 5.7 - 13.3 |
| Cortisol | 1.401 - 6500 | 0.420 | 1.401 | 0.2 - 3.5 | 0.3 - 5.5 |
| 11-Deoxycortisol | 0.009 - 56 | 0.003 | 0.009 | 1.2 - 6.6 | 10.3 - 16.5 |
| DHEA (derivatized) | 0.018 - 216 | 0.006 | 0.018 | 0.1 - 5.0 | 5.8 - 7.8 |
| Progesterone | 0.010 - 64 | 0.003 | 0.010 | 1.0 - 7.7 | 4.2 - 16.8 |
| 17-OH-Progesterone | 0.027 - 228 | 0.008 | 0.027 | 0.9 - 4.3 | 4.0 - 9.1 |
| DHEAS | 1.554 - 2161 | 0.466 | 1.554 | 0.4 - 4.8 | 8.0 - 11.5 |
| Testosterone | 0.005 - 53 | 0.001 | 0.005 | 0.1 - 3.1 | 10.3 - 16.9 |

ORDERING GUIDE

| Order No. | Description | Quantity |
|-----------------|---|-------------------|
| EUM01100 | FloMass® Steroids in Serum (Aldosterone, Androstenedione, Corticosteron, Cortisol, 11-Deoxycortisol, Dehydroepiandrosterone, Progesterone, 17-OH-Progesterone, Dehydroepiandrosterone sulphate, Testosterone) LC-MS/MS detection | 100 assays |
| | Contents | |
| | Mobile Phase A | 1 x EUM01011 |
| | Mobile Phase B | 1 x EUM01012 |
| | Precipitant Solution | 1 x EUM01021 |
| | Internal Standard Mix | 1 x EUM01031 |
| | Separately available components | |
| EUM01011 | Mobile Phase A | 800 ml |
| EUM01012 | Mobile Phase B | 500 ml |
| EUM01021 | Precipitant Solution | 70 ml |
| EUM01031 | Internal Standard Mix | 1.1 ml |
| | Accessory | |
| EUM00C01 | Analytical Column with test chromatogram | 1 pc |
| EUM00A12 | Precolumns | 4 pcs |
| EUM00A13 | Holder (incl. 1 precolumn) | 1 pc |
| EUM01022 | Derivatizing for DHEA | 5 ml |
| EUM01071 | FloTuning Mix A + Mix B Steroids | 2x2 ml |
| | | |
| EUM01051 | Control Set for Steroids in Serum, lyoph. (3 levels) | 2x3x2.5 ml |
| | | |
| EUM01041 | Calibrator Set for Steroids in Serum, lyoph. (7 levels) | 2x7x1 ml |