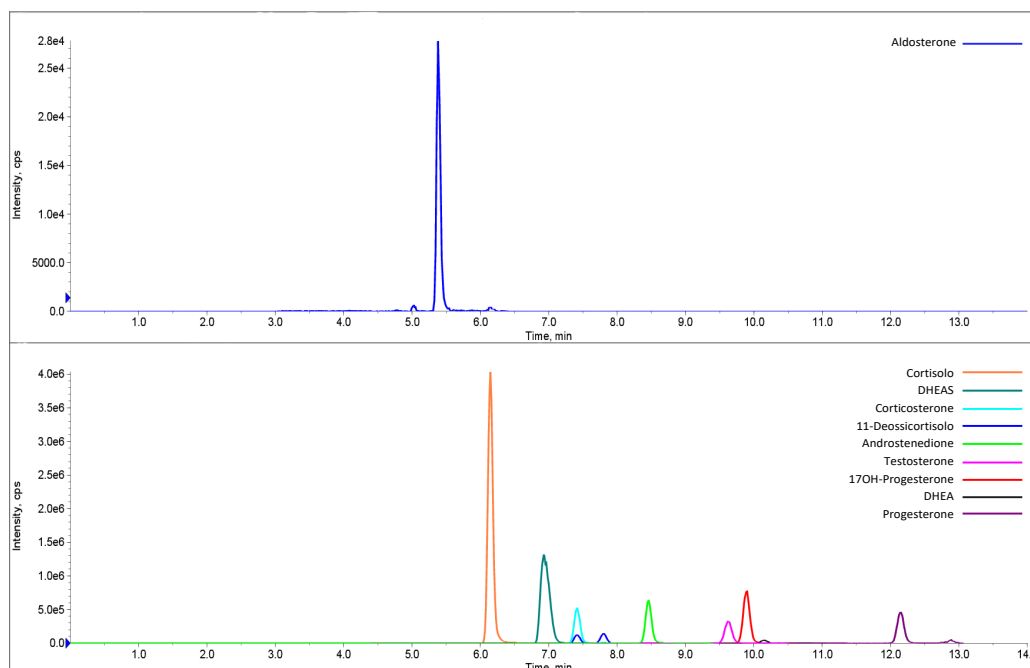


FLOMASS[®] STEROIDS IN SERUM

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 μ L

Running time: 15 min

Column heater: 45 °C

Column conditioning: column should be conditioned for 5 min at chromatographic gradient initial condition. Then run 3 blank injections (MPA only) using the gradient as indicated in IFU

Sample preparation

- Pipette 290 μ L of serum
- Add 610 μ L of Sol Precipitant-Internal Standard Mix sufficient for the number of samples required.
- Vortex and centrifuges for 15 min at 12000 rpm
- Transfer 7000 μ L of the supernatant into a new vial
- Evaporate the solution with nitrogen flow and block heater at 45 °C
- Resuspend the solution with 35 μ L of Mobile Phase B and vortex
- Add 35 μ L of Mobile Phase A and vortex
- Put the vials on a mixer for 5 min
- Transfer the 70 μ L solution into plastic vials and analyze with HPLC-MS/MS technique

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

EUM01100	FloMass® Steroids in Serum	100 assays
EUM01041	7-Levels Calibrators, lyophil.	2 x 7 x 1.0 mL
EUM01051	3-Levels Controls, lyophil.	2 x 3 x 2.5 mL
EUM00C01	Analytical Column	1 pc
EUM00A12	Precolumn	4 pcs