

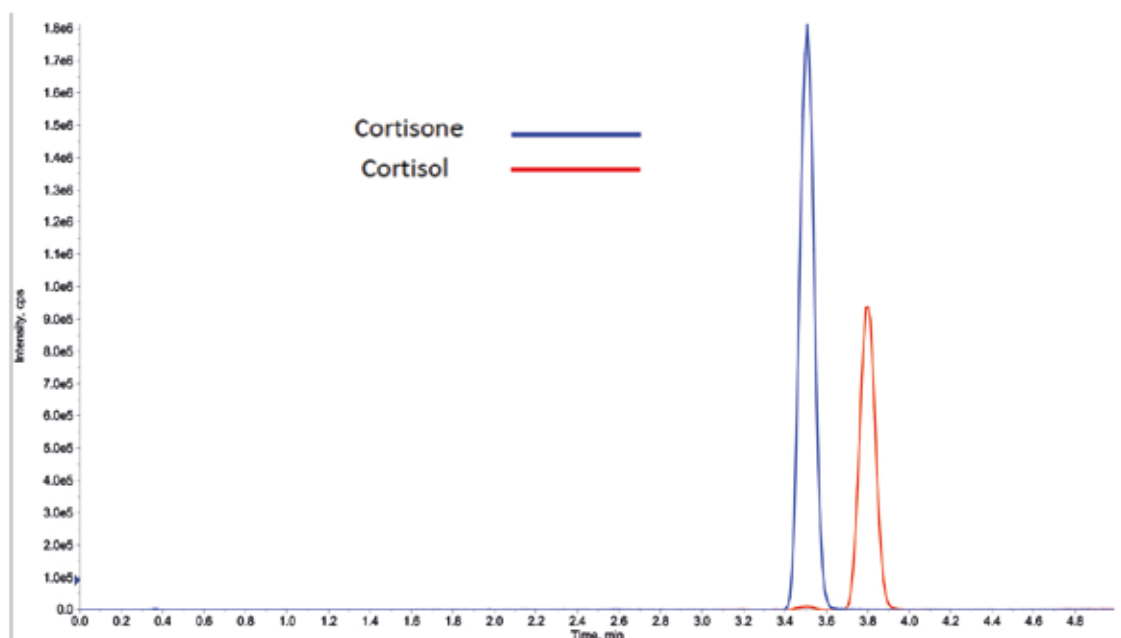
SHORT METHOD DESCRIPTION

FloMass[®] Urinary Free Cortisol and Cortisone

The analysis of free urinary Cortisol (CFU) constitutes the first approach for the screening of endogenous Cushing syndrome (CS) at biochemical laboratory level. CFU measured within 24 hours can be useful also in other clinical conditions characterized by a high level of Cortisol in serum, for example apparent mineralocorticoid excess syndrome (AME).

Cortisol is mainly secreted by adrenal glands, while Cortisone is mainly produced by 11 β -hydroxysteroid dehydrogenase 2 that converts bioactive Cortisol in inactive Cortisone preventing the activation of mineralocorticoid receptor caused by Cortisol.

Cortisol and Cortisone simultaneous determination is very important for the diagnosis of AME, CS but also congenital adrenal hyperplasia and adrenal insufficiency.



HPLC-MS/MS system conditions

Ionization: ESI positive mode

MS/MS: specific MRM

Injection volume: 10 μ l (variable according to instrumental sensitivity)

Running time: 6 min

Column heater: 30 $^{\circ}$ C

Performance

Analyte	Linearity (ng/mL)	LLOD (ng/mL)	LLOQ (ng/mL)	CV% Intra	CV% Inter
Cortisol	2.4 - 15000	0.8	2.4	1.9 - 9.7	2.2 - 3.5
Cortisone	2.1 - 15000	0.7	2.1	1.1 - 3.8	1.8 - 6.5

ORDERING GUIDE

Order No.	Description	Quantity
EUM06200	FloMass® Cortisol/Cortisone in Urine LC-MS/MS detection	200 assays
	Contents	
	Mobile Phase A	1 x EUM06011
	Mobile Phase B	1 x EUM06012
	Solution 1 Precipitant	1 x EUM06021
	Internal Standard	1 x EUM06031
	Separately available components	
EUM06011	Mobile Phase A	900 ml
EUM06012	Mobile Phase B	900 ml
EUM06021	Solution 1 Precipitant	50 ml
EUM06031	Internal Standard	4.5 ml
	Accessory	
EUM00C06	Analytical Column with test chromatogram	1 pc
EUM00A06	Precolumns	4 pcs
EUM00A07	Holder (incl. 1 precolumn)	1 pc
EUM06071	FloTuning Cortisol and Cortisone	1x2 ml
EUM06051	Control Set for Cortisol/Cortisone in Urine, lyoph. (3 levels)	2x3x2 ml
EUM06041	Calibrator Set for Cortisol/Cortisone in Urine, lyoph. (6 levels)	2x6x1 ml