

SHORT METHOD DESCRIPTION

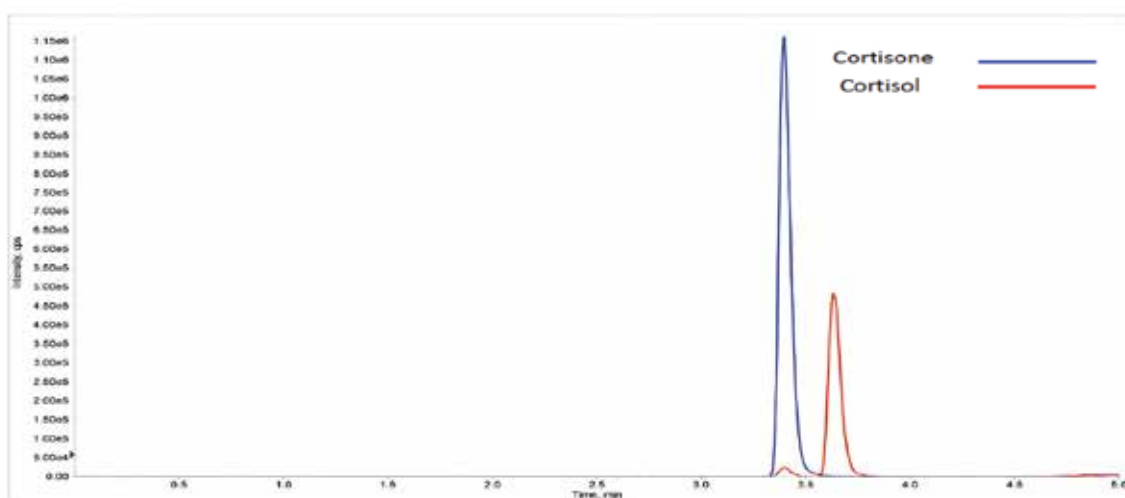
FloMass[®] Cortisol and Cortisone in Saliva

The interest in the use of the salivary matrix is increasing because, in addition to providing metabolic information, it can be collected through a simple, non-invasive method and without medical supervision.

Cortisol and Cortisone are steroid hormones synthesized in the adrenal glands starting from cholesterol. Cortisol and Cortisone are a useful target in the evaluation of mineralocorticoid or glucocorticoid excess, adrenal congenital hyperplasia and adrenal insufficiency. Furthermore, salivary cortisol increases in Cushing's syndrome, decrease in Addison's disease and can be associated with cardiovascular disease, anti-inflammatory and immunosuppressive effects.

The evaluation of salivary Cortisol and Cortisone is a good indicator of concentrations related to the proportion of free Cortisol and Cortisone, therefore not linked to transport proteins, in serum and plasma. For this reason, the analytes are at very low concentrations in the saliva samples (about 5 times lower than plasma and serum).

Therefore, it is necessary to have a sensitive and specific analytical technology to measure these low concentrations of Cortisol and Cortisone present in saliva.



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°C

Performance

Analyte	Linearity (ng/mL)	LLOD (ng/mL)	LLOQ (ng/mL)	CV% Intra	CV% Inter
Cortisol	0.019 - 200	0.0057	0.019	2.3 - 5.4	4.8 - 6.2
Cortisone	0.009 - 500	0.0027	0.009	2.5 - 4.5	5.3 - 6.2

ORDERING GUIDE

Order No.	Description	Quantity
EUM14200	FloMass® Cortisol/Cortisone in Saliva LC-MS/MS detection	200 assays
	Contents	
	Mobile Phase A	1 x EUM06011
	Mobile Phase B	1 x EUM06012
	Solution 1 Dilution	1 x EUM14021
	Solution 2 Extraction	1 x EUM14022
	Solution 3 Reconstitution	1 x EUM14023
	Internal Standard	1 x EUM14031
	Separately available components	
EUM06011	Mobile Phase A	900 ml
EUM06012	Mobile Phase B	900 ml
EUM14021	Solution 1 Dilution	60 ml
EUM14022	Solution 2 Extraction	250 ml
EUM14023	Solution 3 Reconstitution	10 ml
EUM14031	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
EUM14051	Control Set for Cortisol/Cortisone in Saliva, lyoph. (3 levels)	2x3x2 ml
EUM14041	Calibrator Set for Cortisol/Cortisone in Saliva, lyoph. (6 levels)	2x6x1 ml