

This ClinRep® Complete Kit is designed for the convenient on-line SPE HPLC analysis of the catecholamines. A time consuming manual sample preparation is not required with this method. Prior to the on-line analysis the samples simply have to be spiked with the internal standard (one step sample pretreatment).

Biogenic Amines

Catecholamines in Urine – on-line Analysis

Test Data

Linearity:	3 - 1500 µg/l
Recovery:	95 - 100 %
LOD:	1 µg/l
LLOQ:	3 µg/l
Intraassay precision:	3.0 % (NE), 4.5 % (E), 0.8 % (D)
Interassay precision:	3.6 % (NE), 6.4 % (E), 2.4 % (D)

HPLC Parameters

Pump 1	
(SPE-buffer):	isocratic pump, flow rates: 0.5, 2.0 ml/min
Pump 2	
(mobile phase):	isocratic pump, flow rate: 1.2 ml/min
Switching valve:	6-port/3-channel switching valve (order no. FK1102)
Injection volume:	50 µl
Injection interval:	20 min
Fluorescence	
detector:	275 nm (exc.), 330 nm (em.)
HPLC-Thermostat:	30 °C

Sample Pretreatment

Addition of IS:

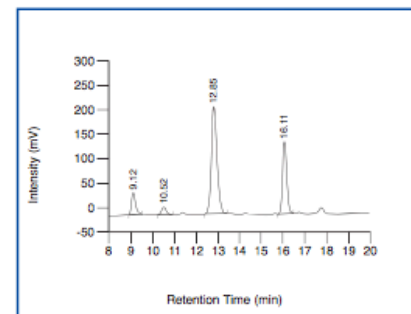
Add 20 µl Internal Standard IS/ml urine

on-line Analysis: ↓ centrifuge

Inject 50 µl

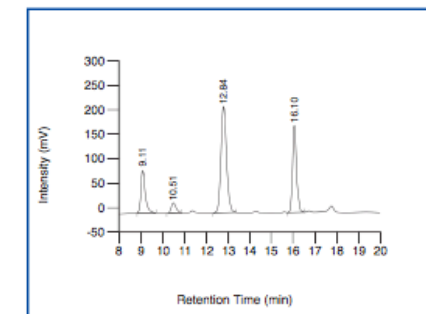
NE: Norepinephrine
E: Epinephrine
D: Dopamine

ClinChek® Urine Control, Level I (+ 20 µl IS/ml urine)



Norepinephrine: 9.12 min, Epinephrine: 10.52 min,
IS: 12.85 min, Dopamine: 16.11 min

ClinChek® Urine Control, Level II (+ 20 µl IS/ml urine)



Norepinephrine: 9.11 min, Epinephrine: 10.51 min,
IS: 12.84 min, Dopamine: 16.10 min

Ordering Information

Order No.	Description	Quantity
2100	ClinRep® Complete Kit for Catecholamines in Urine for 500 assays	1 pce.
Kit components (order no. 2100):		
2109	SPE-Buffer	4 x 2109 (4 x 2500 ml)
2110	Mobile Phase	6 x 2110 (6 x 2500 ml)
2011	Standard Solution	10 ml
2113	Urine Calibrator (FD), lyophil.	5 x 5 ml
	Manual	1 pce.
	Quick Reference	1 pce.
Optional components:		
2012	Internal Standard IS	3 ml
Start Accessories:		
1232	Guard Column Holder	1 pce.
1233	Guard Column	4 pcs.
2130	Analytical Column with test chromatogram	1 pce.
2131	SPE-Column	1 pce.
FK5810	PEEK capillary connector	1 pce.
FK5820	Stainless steel prefilter holder	1 pce.
FK7400	Inline-Filter (stainless steel sieve, free of dead volume)	1 pce.
Accessories:		
FK1102	Switching valve, Sykam (6-port/3-channel incl. electr. drive, PEEK)	1 pce.
FK5821	Replacement filter for stainless steel prefilter holder	10 pcs.
FK7330	Endfittings	2 pcs.
FK7340	Sealings and sieves	4 pcs. each
FK7350	Endstoppers	2 pcs.
ClinChek® Controls:		
2180	Urine Control (FD), lyophil., Level I	10 x 5 ml
2181	Urine Control (FD), lyophil., Level II	10 x 5 ml
2182	Urine Control (FD), lyophil., Level I, II	2 x 5 x 5 ml

→ on-line sample preparation

→ Robust chromatography
with fluorescence detection