

The porphyrin excretion profile is used for the diagnosis of porphyrias. This ClinRep® Complete Kit allows for a separation (differentiation) of the urinary porphyrins with high resolution (in different porphyrin-isomers!) and ensures an exact quantification. For sample preparation, the samples simply have to be spiked with an internal standard and centrifuged. For porphyria screening ClinEasy® Photometric Complete Kits are available for the determination of the total porphyrins, 5-aminolevulinic acid and porphobilinogen (see pages 108 - 113).

Metabolic Diseases

Porphyrians Differentiated in Urine

Test Data

Linearity: 1 - 5000 µg/l
 LOD: 0.5 µg/l
 LLOQ: 1 µg/l
 Intraassay precision: 2.3 %
 Interassay precision: 2.6 %

HPLC Parameters

Pump: binary gradient pump,
 flow rate: 0.7 ml/min
 Injection volume: 20 µl
 Injection interval: 20 min
 Fluorescence detector: 394 nm (exc.), 624 nm (em.)
 HPLC-Thermostat: 30 °C

Sample Preparation

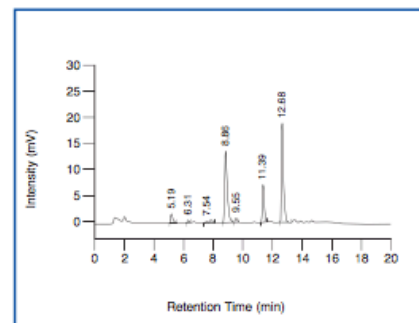
Addition of IS:

500 µl urine (calibrator, control, patient)	50 µl Internal Standard IS
--	-------------------------------

HPLC Analysis: ↓ centrifuge

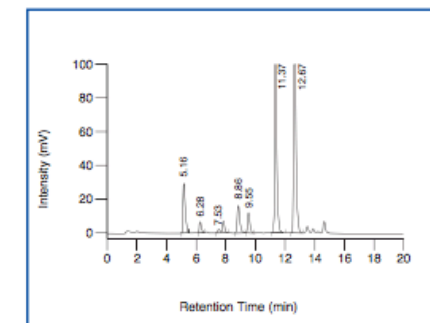
Inject 20 µl of the supernatant

ClinChek® Urine Control, Level I



Uroporphyrin I: 5.19 min, Heptacarboxyporphyrin I: 6.31 min,
 Hexacarboxyporphyrins (Iac and lab Isomer): 7.54 min,
 Internal Standard IS: 8.86 min, Pentacarboxyporphyrin I: 9.55 min,
 Coproporphyrin I: 11.39 min, Coproporphyrin III: 12.68 min

ClinChek® Urine Control, Level II



Uroporphyrin I: 5.16 min, Heptacarboxyporphyrin I: 6.28 min,
 Hexacarboxyporphyrins (Iac and lab Isomer): 7.53 min,
 Internal Standard IS: 8.86 min, Pentacarboxyporphyrin I: 9.55 min,
 Coproporphyrin I: 11.37 min, Coproporphyrin III: 12.67 min

Ordering Information

Order No.	Description	Quantity
17000	ClinRep® Complete Kit for Porphyrins in Urine for 100 assays	1 pce.
Kit Components (order no. 17000):		
17008	Mobile Phase A	2 x 17008 (2 x 1000 ml)
17009	Mobile Phase B	800 ml
17011	Standard Solution	5 ml
17012	Internal Standard IS	5 ml
17013	Urine Calibrator, lyophil.	5 x 5 ml
17020	Vials for Sample Pretreatment	100 pcs.
	Manual	1 pce.
	Quick Reference	1 pce.
Start Accessories:		
17030	Analytical Column with test chromatogram	1 pce.
17032	Guard Column Holder incl. 1 Guard Column	1 pce.
17033	Guard Column	5 pcs.
Accessories:		
FK5810	PEEK tubing (connection of prefilter and column)	1 pce.
FK5820	Stainless steel prefilter holder	1 pce.
FK5821	Replacement filter for stainless steel prefilter holder	10 pcs.
ClinChek® Controls:		
17080	Urine Control, lyophil., Level I	10 x 5 ml
17081	Urine Control, lyophil., Level II	10 x 5 ml
17082	Urine Control, lyophil., Level I, II	2 x 5 x 5 ml



→ High resolution of the porphyrin profile

→ No interferences

→ High analytical sensitivity