

This new ClinRep® UHPLC Complete Kit shows an identical analyte spectrum as the ClinRep® HPLC Complete Kit with order no. 14000 (see pages 82 - 83). Thus, the following 16 substances can be quantified simultaneously: carbamazepine, eslicarbazepine, ethosuximide, felbamate, lacosamide, lamotrigine, oxcarbazepine, phenobarbital, phenytoin, primidone, rufinamide, sulthiame and zonisamide as well as the pharmacologically active metabolites N-desmethylnmethsuximide, 10-hydroxy-carbamazepine and carbamazepine-epoxide. The chromatographic separation is performed with an injection interval of 5 min only.

## Antiepileptic Drugs

# Antiepileptics in Serum / Plasma with UHPLC

### Test Data

The test data are available on request.

### UHPLC Parameters

Pump: binary gradient pump,  
flow rate: 0.4 ml/min

Injection volume: 2 µl

Injection interval: 5 min

UV-Detector: 205 nm

HPLC-Thermostat: 30 °C

### Sample Preparation

#### Precipitation:

100 µl sample	200 µl Precipitant P (contains Internal Standard)
---------------	--

↓ centrifuge

#### Dilution:

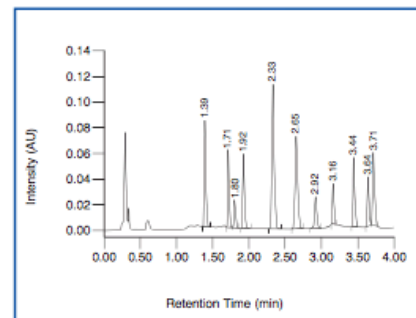
150 µl supernatant	250 µl Diluting Solution D
--------------------	----------------------------

↓

#### UHPLC Analysis:

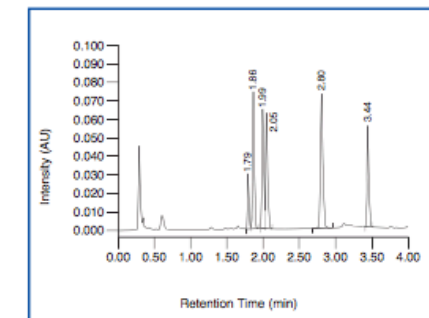
Inject 2 µl of the diluted supernatant
--

ClinChek® Serum Control, Level II (order no. 14081)



Ethosuximide: 1.39 min, Primidone: 1.71 min, Sulthiame: 1.80 min, Lamotrigine: 1.92 min, 10-Hydroxy-Carbamazepine: 2.33 min, Phenobarbital: 2.65 min, Carbamazepine-epoxide: 2.92 min, Oxcarbazepine: 3.16 min, IS: 3.44 min, Carbamazepine: 3.64 min, Phenytoin: 3.71 min

ClinChek® Serum Control, Level II (order no. 14181)



Lacosamide: 1.79 min, Zonisamide: 1.86 min, Felbamate: 1.99 min, Rufinamide: 2.05 min, N-Desmethylnmethsuximide: 2.80 min, IS: 3.44 min

### Ordering Information

Order No.	Description	Quantity
14100	ClinRep® Complete Kit for Antiepileptics in Serum / Plasma for 100 assays	1 pce.
<b>Kit Components (order no. 14100):</b>		
14108	Mobile Phase A	400 ml
14109	Mobile Phase B	200 ml
14011	Standard Solution Antiepileptics 3	3 ml
14012	Precipitant P with Internal Standard	20 ml
14013	Serum Calibrator Antiepileptics 3, lyophil.	3 ml
14020	Sample Preparation Vials	100 pcs.
14021	Diluting Solution D	25 ml
	Manual	1 pce.
	Quick Reference	1 pce.
<b>Optional Components:</b>		
14111	Standard Solution Antiepileptics 4	3 ml
15111	Standard Solution for Lamotrigine and Sulthiame	3 ml
14113	Serum Calibrator Antiepileptics 4, lyophil.	3 ml
15113	Plasma Calibrator for Lamotrigine and Sulthiame, lyophil.	3 ml
<b>Start Accessories:</b>		
14130	Analytical Column with test chromatogram	1 pce.
<b>ClinChek® Controls:</b>		
14080	Serum Control Antiepileptics 3, lyophil., Level I	10 x 3 ml
14081	Serum Control Antiepileptics 3, lyophil., Level II	10 x 3 ml
14082	Serum Control Antiepileptics 3, lyophil., Level I, II	2 x 5 x 3 ml
14180	Serum Control Antiepileptics 4, lyophil., Level I	10 x 3 ml
14181	Serum Control Antiepileptics 4, lyophil., Level II	10 x 3 ml
14182	Serum Control Antiepileptics 4, lyophil., Level I, II	2 x 5 x 3 ml
15180	Plasma Control for Lamotrigine and Sulthiame, lyophil., Level I	10 x 3 ml
15181	Plasma Control for Lamotrigine and Sulthiame, lyophil., Level II	10 x 3 ml
15182	Plasma Control for Lamotrigine and Sulthiame, lyophil., Level I, II	2 x 5 x 3 ml

→ Simultaneous determination of 16 AEDs including:

- Lacosamide
- Zonisamide
- Felbamate
- Rufinamide
- Eslicarbazepine

→ Injection interval: 5 min