

This ClinRep® Complete Kit is designed for the fully automated analysis of CDT with liquid handling systems and subsequent on-line SPE HPLC. The analytical method correlates with the candidate reference method of the IFCC-CDT-WG* and ensures a reliable separation of all relevant transferrin isoforms (a-, mono-, di-, ..., hexasialotransferrin). This applies in particular for disialotransferrin, the most important CDT isoform. An accurate calculation of the CDT value is ensured by baseline separation.

* Working group of the IFCC for the international standardisation of CDT measurement.

Alcoholism, Drug Abuse

CDT in Serum – Automated on-line Analysis

Test Data

LOD: 0.1 %*

LLOQ: 0.3 %*

Intraassay precision: 2.8 %

Interassay precision: 2.5 %

* depending on the amount of total transferrin and on detector sensitivity

HPLC Parameters

Pump 1: binary gradient pump,
flow rate: 1.4 ml/min

Pump 2: isocratic pump,
flow rate: 0.4 ml/min

Injection volume: 400 µl

Injection interval: 9.5 min

UV/VIS-Detector: 460 nm

HPLC-Thermostat: 40 °C

Sample Pretreatment (Liquid Handling System)

Dilution:

500 µl Diluting Solution D

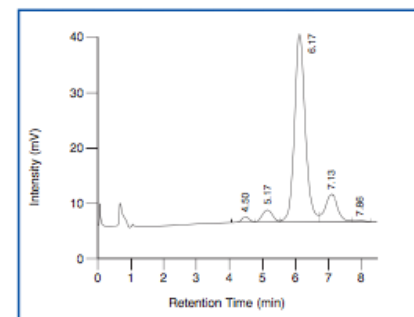
50 µl serum

1. incubate (30 min, 4 °C) ↓ 2. centrifuge

on-line Analysis:

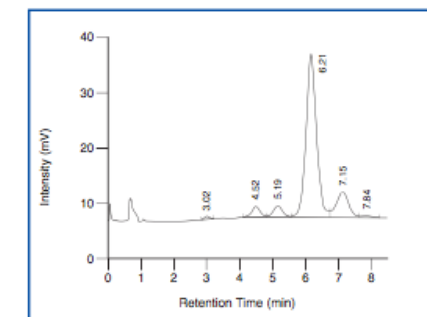
Inject 400 µl

Native sample, normal range



Disialotransferrin: 4.50 min, Trisialotransferrin: 5.17 min,
Tetrasialotransferrin: 6.17 min, Pentasialotransferrin: 7.13 min,
Hexasialotransferrin: 7.86 min

Native sample, pathological range



Asialotransferrin: 3.02 min, Disialotransferrin: 4.52 min,
Trisialotransferrin: 5.19 min, Tetrasialotransferrin: 6.21 min,
Pentasialotransferrin: 7.15 min, Hexasialotransferrin: 7.84 min

Ordering Information

Order No.	Description	Quantity
21200	ClinRep® Complete Kit for CDT in Serum for 300 assays	1 pce.
Kit Components (order no. 21200):		
21007	Mobile Phase A	3 x 21007 (3 x 2000 ml)
21008	Mobile Phase B	2000 ml
21009	Mobile Phase C	2 x 21009 (2 x 2000 ml)
21221	Diluting Solution D	3 x 21221 (3 x 50 ml)
	Manual	1 pce.
	Quick Reference	1 pce.
Optional Components:		
21014	Test Solution	15 ml
Start Accessories:		
21030	Analytical Column with test chromatogram	1 pce.
21032	Cartridge incl. 1 precolumn	1 pce.
FK5820	Stainless steel prefilter holder	1 pce.
FK7400	Inline-Filter (stainless steel sieve, free of dead volume)	1 pce.
Refill Service:		
21031	Analytical Column with test chromatogram (original column needs to be returned)	1 pce.
Accessories:		
21033	Precolumns	5 pcs.
21220	Deepwell plate 96/500µl	8 pcs.
FK1102	Switching valve, Sykam (6-port/3-channel incl. electr. drive, PEEK)	1 pce.
FK5810	PEEK tubing (connection of prefilter and column)	1 pce.
FK5821	Replacement filter for stainless steel prefilter holder	10 pcs.
FK7340	Sealings and sieves	4 pcs. each
FW3000	Fixed-Wavelength-VIS-Detector (460 nm), complete	1 pce.
RC2002	Sodium-Hypochlorite-Solution (5 %)	12 ml
ClinChek® Controls:		
21080	Serum Control, lyophil., Level I	10 x 1 ml
21081	Serum Control, lyophil., Level II	10 x 1 ml
21082	Serum Control, lyophil., Level I, II	2 x 5 x 1 ml

→ Fully automated method

→ Fast analysis: injection interval of 9.5 min only

→ Unique chromatographical resolution