

The present on-line test kit is designed as a fast (injection interval: 9.5 min) and fully automated method for CDT analysis. A manual sample preparation is not required, but is performed on-line within the HPLC system. The pretreatment step (see below) serves for the iron saturation of the samples and is performed automatically by a barcode sampling system.

New: Quantification of transferrin isoforms including hexasialotransferrin, baseline integration (acc. to IFCC reference method)



→ Fully automated method

→ Run time: 9.5 min

→ Quantification of all transferrin isoforms (including hexasialo-transferrin)

## Alcoholism

# CDT (Carbohydrate-Deficient Transferrin) in Serum – On-Line Analysis

### Test Data

- Lower detection limit: 0.4 %\*
- Lower determination limit: 0.6 %\*
- Intraassay precision: 4.5 %
- Interassay precision: 3.9 %
- \*depends on the amount on total transferrin

### 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 - 500 µl
- Injection interval: 9.5 min
- UV/VIS-Detector: 460 nm (e.g. RECIPE Fixed-Wavelength-VIS-Detector for CDT, see pages 152 - 153)
- HPLC-Thermostat: 40 °C

### Sample Pretreatment

Dilution:

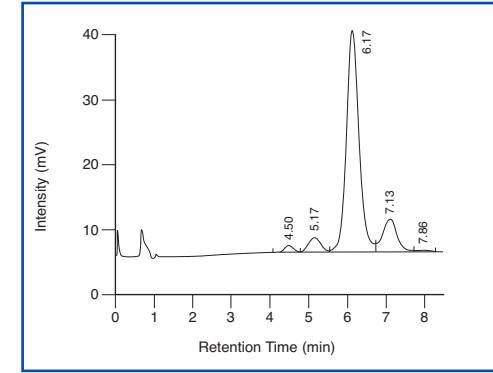
100 µl serum

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

HPLC Analysis:

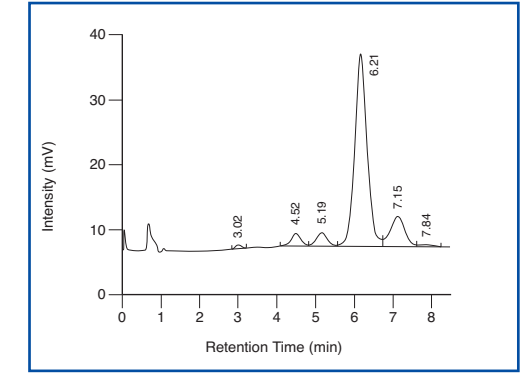
Inject 400 - 500 µl

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
21100	ClinRep® Complete Kit for CDT in Serum for 300 assays	1 pce.
<b>Kit Components (order no. 21100):</b>		
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)
21120	Vials for Sample Pretreatment with Diluting Solution	6 x 21120 (6 x 50 pcs.)
	Manual	1 pce.
	Quick Reference	1 pce.
<b>Optional Components:</b>		
21014	Test Solution	15 ml
<b>Start Accessories:</b>		
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.
<b>Refill Service:</b>		
21031	Analytical Column with test chromatogram (only if you send back your original column)	1 pce.
<b>Accessories:</b>		
21033	Precolumns	5 pcs.
FK1100	Switching valve, Knauer (6-port/3-channel incl. Motor, stainless steel)	1 pce.
FK5305	Sample loop, PEEK, 500 µl	1 pce.
FK5810	PEEK tubing (connection of prefilter and column)	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.
FW3000	Fixed-Wavelength-VIS-Detector for CDT (460 nm), complete	1 pce.
RC2002	Sodium-Hypochlorite-Solution (5 %)	12 ml
<b>Barcode sampling system:</b>		
On request		
<b>ClinChek® Controls:</b>		
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