

The combi kit enables the combined measurement of the vitamins B1, B2, and B6. It consists of the chromatography kit (order no. 27000) and appropriate sample preparation kits (order nos. 27001, 27002, 27006). The chromatography is performed with a single column for all B-vitamins in subsequent series of measurement. For switching the parameter (e.g. vitamin B1 --> vitamin B2) simply the parameter settings have to be changed (see HPLC parameters). By selecting the appropriate sample preparation kits, the customer is flexible to choose the parameters according to his needs.

Vitamin Status

Vitamin B1, B2 in Whole Blood and B6 in Plasma / Whole Blood (CombiKit)

Test Data

On request

HPLC Parameters

	Vitamin B1
Pump (Mobile Phase A + B):	flow rate 1 ml/min ratio A : B = 93 : 7
Pump (Reagent N):	flow rate 0.1 ml/min
Injection volume:	50 µl
Injection interval:	6 min
HPLC-Thermostat:	35 °C
Detector (exc. / em.):	376 nm / 435 nm
Retention times:	
Thiamine	approx. 5.1 min
TPP	approx. 2.5 min

HPLC Parameters

	Vitamin B2
Pump (Mobile Phase A + B):	flow rate 1 ml/min ratio A : B = 80 : 20
Injection volume:	50 µl
Injection interval:	10 min
HPLC-Thermostat:	40 °C
Detector (exc. / em.):	450 nm / 530 nm
Retention times:	
Riboflavin	approx. 8.2 min
FMN	approx. 5.2 min
FAD	approx. 2.8 min

HPLC Parameters

	Vitamin B6
Pump (Mobile Phase A + B):	flow rate 1 ml/min ratio A : B = 100 : 0
Pump (Reagent N):	flow rate 0.2 ml/min
Injection volume:	50 µl
Injection interval:	10 min
HPLC-Thermostat:	25 °C
Detector (exc. / em.):	370 nm / 470 nm
Retention times:	
Pyridoxal	approx. 8.8 min
PLP	approx. 5.2 min

Sample Preparation Vitamin B1: see page 62, Vitamin B2: see page 64, Vitamin B6: see page 66

Chromatograms See chromatograms on page 63 (Vitamin B1), 65 (Vitamin B2), and 67 (Vitamin B6)

Ordering Information The combi kit consists of the chromatography kit (order no. 27000) and the separate sample preparation kits (order nos. 27001, 27002 and 27006).

A: Chromatography

Order No.	Description	Quantity
27000	ClinRep® Chromatography Kit for Vitamin B1, B2 and B6 for 1000 assays	1 pce.
Kit Components (order no. 27000):		
27008	Mobile Phase A	4 x 27008 (4 x 2400 ml)
27009	Mobile Phase B	2 x 27009 (2 x 1000 ml)
27030	Analytical Column with test chromatogram	1 pce.
27033	Guard Column	5 pcs.
FK5821	Replacement filter for stainless steel prefilter holder	10 pcs.
	Manual	1 pce.
	Quick Reference	1 pce.
Accessories:		
27032	Guard Column Holder incl. 1 Guard Column	1 pce.
FK2000	ClinLab® Peristaltic pump	1 pce.
FK2001	Replacement tubing for peristaltic pump	2 pcs.
FK5121	T-Union (PEEK), 1/16"	1 pce.
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:		
8870	Serum Control, lyophil., Level I	10 x 5 ml
8871	Serum Control, lyophil., Level II	10 x 5 ml
8872	Serum Control, lyophil., Level III	10 x 5 ml
8873	Serum Control, lyophil., Level I, II, III	3 x 3 x 5 ml
8874	Whole Blood Control, lyophil., Level I	10 x 2 ml
8875	Whole Blood Control, lyophil., Level II	10 x 2 ml
8876	Whole Blood Control, lyophil., Level I, II	2 x 5 x 2 ml

B: Sample Preparation

Order No.	Description	Quantity
27001	ClinRep® Sample Preparation Kit for Vitamin B1 in Whole Blood for 100 assays	1 pce.
Kit Components (order no. 27001):		
Identical with order no. 24000 (s. page 63);		
27002	ClinRep® Sample Preparation Kit for Vitamin B2 in Whole Blood for 100 assays	1 pce.
Kit Components (order no. 27002):		
Identical with order no. 25000 (s. page 65);		
27006	ClinRep® Sample Preparation Kit for Vitamin B6 in Plasma and Whole Blood for 100 assays	1 pce.
Kit Components (order no. 27006):		
Identical with order no. 26000 (s. page 67);		

exception: Mobile Phase not included

→ High flexibility:
1 Chromatography kit
+ 3 sample preparation kits

