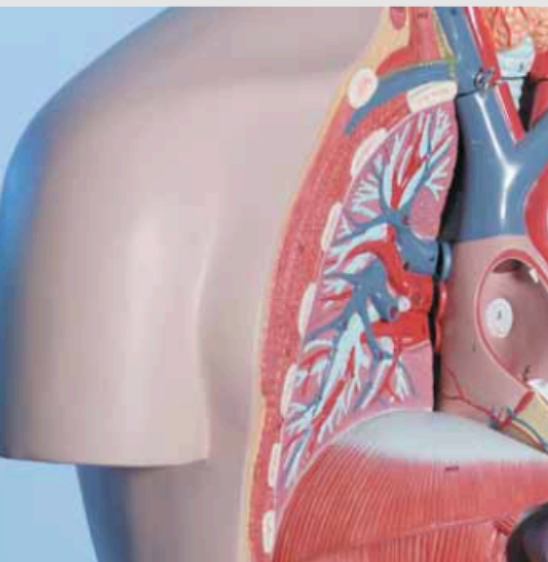


Osteoporosis is a metabolic bone disease which is characterised by an abnormally low bone density and therefore is associated with an increased risk of fracture. The bone degradation goes along with an increased formation of the amino acid hydroxyproline, which is released into blood circulation and is excreted with urine. The RECIPE test kit guarantees an accurate hydroxyproline measurement. Using a special sample preparation, hydroxyproline is turned into a derivative and can be quantified without interferences from other amino acids.



→ High analytical selectivity

→ Injection interval: 8 min

→ Reliable determination

Metabolic Diseases

Hydroxyproline in Urine

Test Data

Linearity: 5 - 170 mg/l
 Recovery: 90 - 100 %
 LOD: 3 mg/l
 LLOQ: 5 mg/l
 Intraassay precision: 3.5 %
 Interassay precision: 4.5 %

HPLC Parameters

Pump: binary gradient pump,
 flow rates: 1.2, 1.4 ml/min
 Injection volume: 20 μ l
 Injection interval: 8 min
 UV/VIS-Detector: 471 nm
 HPLC-Thermostat: 60 °C

Sample Preparation

Hydrolysis:

1 ml urine	100 μ l Internal Standard IS	1 ml HCl
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↓ incubate (16 h, 95 °C)

Derivatisation:

1. 100 μ l sample + 300 μ l Reagent A + 800 μ l Reagent B / C
2. 500 μ l sample + 200 μ l Reagent D
3. 150 μ l sample + 200 μ l Reagent E

Dilution:

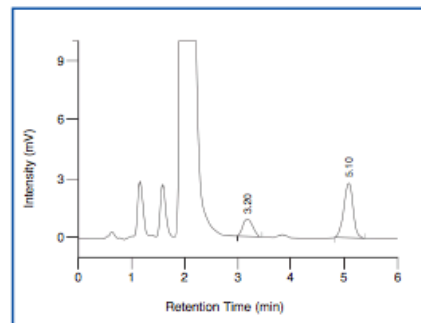
↓ incubate (10 min, 70 °C)

Complete sample	500 μ l Mobile Phase A
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HPLC Analysis:

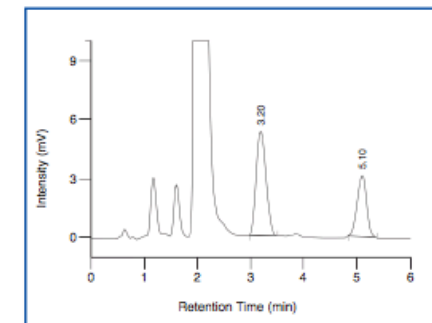
↓
 Inject 20 μ l

ClinChek® Urine Control, Level I



Hydroxyproline: 3.20 min, IS: 5.10 min

ClinChek® Urine Control, Level II



Hydroxyproline: 3.20 min, IS: 5.10 min

Ordering Information

Order No.	Description	Quantity
16000	ClinRep® Complete Kit for Hydroxyproline in Urine for 100 assays	1 pce.
Kit Components (order no 16000):		
16008	Mobile Phase A	1000 ml
16009	Mobile Phase B	150 ml
16011	Standard Solution	5 ml
16012	Internal Standard IS	10 ml
16013	Urine Calibrator, lyophil.	5 x 8 ml
16020	Hydrolysis Tubes with caps	100 pcs.
16021	pH - Test Stripes	100 pcs.
16022	Reagent A	30 ml
16023	Reagent B	80 ml
16024	Reagent C	80 ml
16025	Reagent D	2 x 16025 (2 x 50 mg)
16026	Reagent E	20 ml
	Manual	1 pce.
	Quick Reference	1 pce.
Start Accessories:		
16030	Analytical Column with test chromatogram	1 pce.
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:		
8820	Urine Control, lyophil., Level I	10 x 8 ml
8821	Urine Control, lyophil., Level II	10 x 8 ml
8822	Urine Control, lyophil., Level I, II	2 x 5 x 8 ml