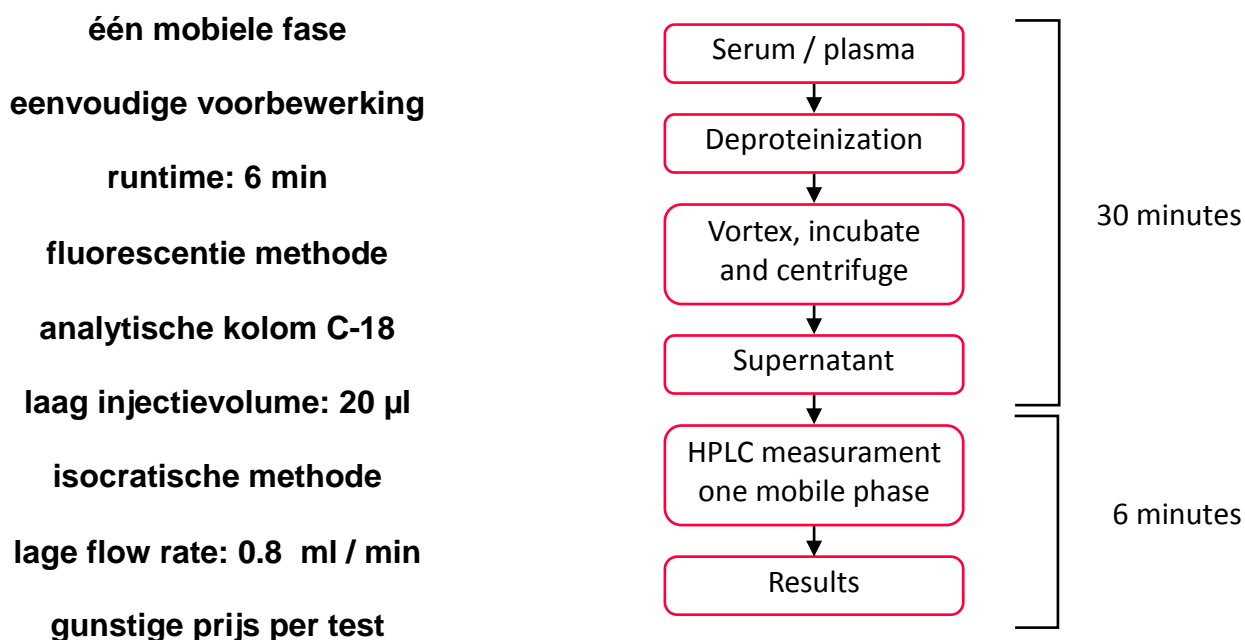


## HOMOCYSTEINE IN SERUM OF PLASMA M.B.V. HPLC EN FLUORESCENTIE DETECTIE

Products	Product no.	Quantity
Homocysteine Reagent Set	2487	50 – 70 Determinations
Homocysteine Calibration Standard	2478	1 x 2 ml
Homocystein Internal Standard	2492	1 x 2 ml
Homocysteine Control Plasma Normal Level	2485	1 x 2 ml
Homocysteine Control Plasma High Level	2486	1 x 2 ml

### In een half uur van monster naar analyse uitslagen



### Vraag meer informatie en/of testverpakking aan.

Telephone (+31)(0)596 – 634 831  
 Telefax (+31)(0)596 – 634 755  
 E-mail info@instru chemie.nl  
 Internet www.instru chemie.nl

Visiting address  
 Zwet 26  
 9932 AB Delfzijl  
 The Netherlands

Postal address  
 P.O. Box 120  
 9930 AC Delfzijl  
 The Netherlands

**DETERMINATION OF HOMOCYSTEINE BY HPLC-FD IN SERUM OR PLASMA****CLINICAL BACKGROUND AND ASSAY PRINCIPLE**

Homocysteine is a risk factor for premature cardiovascular disease. Determination of homocysteine in plasma and serum is useful both in the diagnosis and follow-up of folate and cobalamin (Vitamin B12) deficiencies and rare inborn errors causing hyper homocysteinemia. The methionine loading test can help diagnosis (2). (Oral 100 mg/kg body weight). Homocysteine is bound to plasma proteins by disulfide bonds. Therefore it is necessary for the determination of total Homocysteine to reduce these disulfide bonds. After deproteinization and bringing the solution to the right pH, derivatization take place.

A good separation of Cysteine, Cysteinylglycine and Homocysteine will be obtained with an Inertsil Analytical column Polaris C18-A. Collected blood samples should be centrifuged immediately after collection and the serum or plasma should be stored at -20 °C when not directly analyzed. Before analysis frozen samples must be thawed at room temperature.

**SAMPLING**

Serum or Plasma

**ANALYTICAL CONDITIONS:**

Column : Polaris C18A, 5 µm packing  
Flow Rate : 0.8 ml/min  
Temperature : 25 °C  
Detection : Fluorescence (excitation 390 nm, emission 500 nm)  
Injection volume : 20 µl  
Runtime : Samples 12 min.

**INTERPRETATION**

Peak No.	Component	Polaris C18-A, 5 µm Approx. retention time
1.	Internal Standard	2 min.
2.	Cysteine	4 min.
3.	Cysteinylglycine	5 min.
4.	Homocysteine	7 min.

**LINEARITY**

Up to 150 µmol/l

**EXPECTED VALUES**

	Male	Female	After methionine loading test
Homocysteine, plasma	6.18 – 13.37 µmol/l	3.27 – 12.43 µmol/l	
Homocysteine, serum	8.56 – 17.12 µmol/l	3.92 – 16.84 µmol/l	< 60 µmol/l

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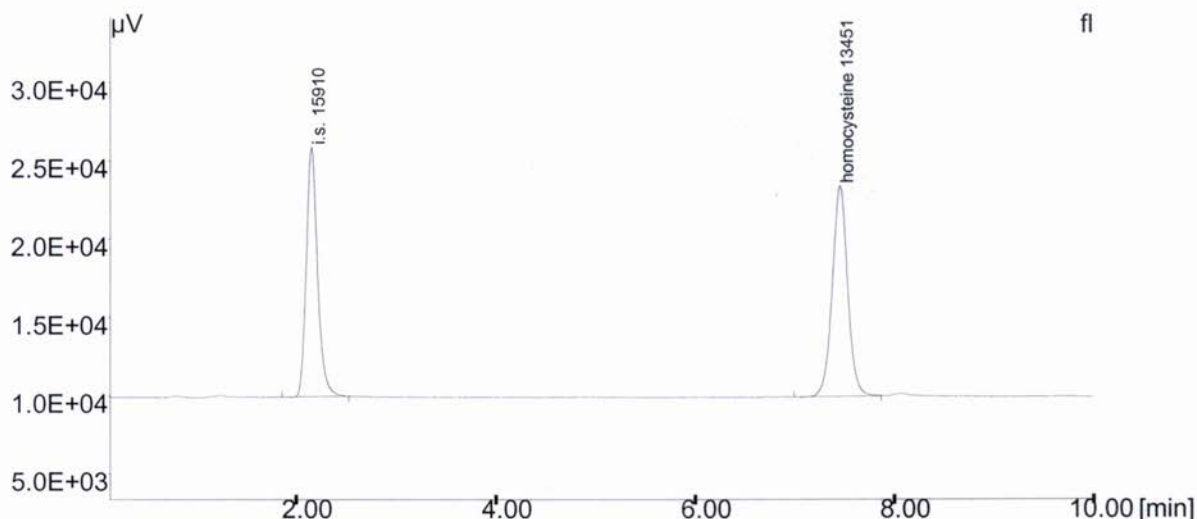
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## Chromatogram Homocysteine - Analyse

-1- S2100012.CH1 : Homocysteine Calibration Standard, 2478  
 : Concentration = 14.8 µmol / liter

### Homocysteine



File name : S2100012.CH1  
 Info :

Vial # = 2 Rack # = 1  
 Acqu. Date : 2-Aug-11 9:41:34  
 Curr. Date : 2-Aug-11 10:02:06  
 User : SW  
 Audit Trail Functions :

Data Type : Raw Data  
 Control Method :

#	Name	Rt	Height	Area	Asymmetry	Plates
1	i.s.	2.16	15910	124531.000	1.15	1916.6
2	homocysteine	7.46	13451	144150.500	0.95	11944.3

Total Sample Weight = 0.00000 mg

Injection Volume = 20.00 µl

Administrator Validation = SW

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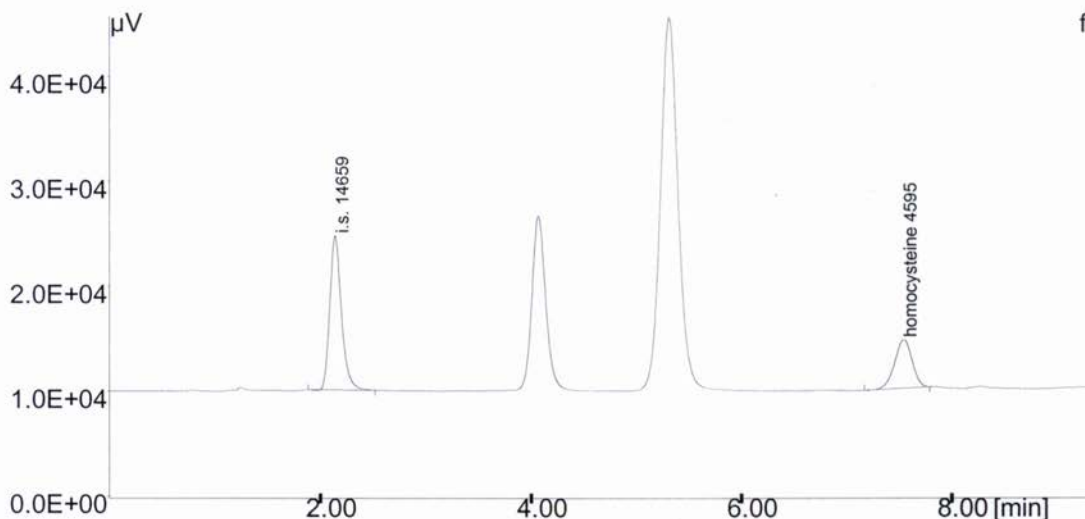
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## Chromatogram Homocysteine - Analyse

-2- N2-017.CH1 : Patient sample  
 : Concentration = 5 µmol / liter

### Homocysteine



File name : N2\_\_017.CH1  
 Info :

Vial # = 7 Rack # = 1  
 Acq. Date : 2-Aug-11 10:38:58  
 Curr. Date : 2-Aug-11 10:48:50  
 User : SW  
 Audit Trail Functions :

Data Type : Raw Data  
 Control Method :

#	Name	Rt	Height	Area	Asymmetry	Plates
1	i.s.	2.14	14659	112075.000	1.25	1961.3
2	homocysteine	7.54	4595	52948.000	1.00	9758.9

Total Sample Weight = 0.00000 mg

Injection Volume = 20.00 µl

Administrator Validation = SW

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RETOUR: FAX – FORMULIER : 0596 – 634 755

TELEFOON NR.: 0596 – 634 831

EMAIL: [info@instruchemie.nl](mailto:info@instruchemie.nl)

<b>Aan</b>	INstru <b>chemie</b> B.V.
<b>Attentie</b>	Sales & Marketing
<b>Tel nr.</b>	0596 – 634 831
<b>Fax nr.</b>	0596 – 634 755
<b>E-mail</b>	<a href="mailto:info@instruchemie.nl">info@instruchemie.nl</a>
<b>Datum</b>	August 2018
<b>Referentie</b>	2180817-1.FEN

**Ik wens:**

<input type="checkbox"/>	<b>Persoonlijk contact.</b>	<b>Over:</b>
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<input type="checkbox"/>	<b>Meer informatie.</b>	<b>Over:</b>
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<input type="checkbox"/>	<b>Actuele prijzen.</b>	<b>Van:</b>
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<input type="checkbox"/>	<b>Catalogus.</b>	<b>Producten / fabrikanten programma's in een luxe ringband. (Meer dan 1500 bepalingen, reagentia, standaarden, controles).</b>
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**Verzenden naar:**

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