

B30-22 Rapid Analysis of Phenylalanine, Tyrosine and Homocystine

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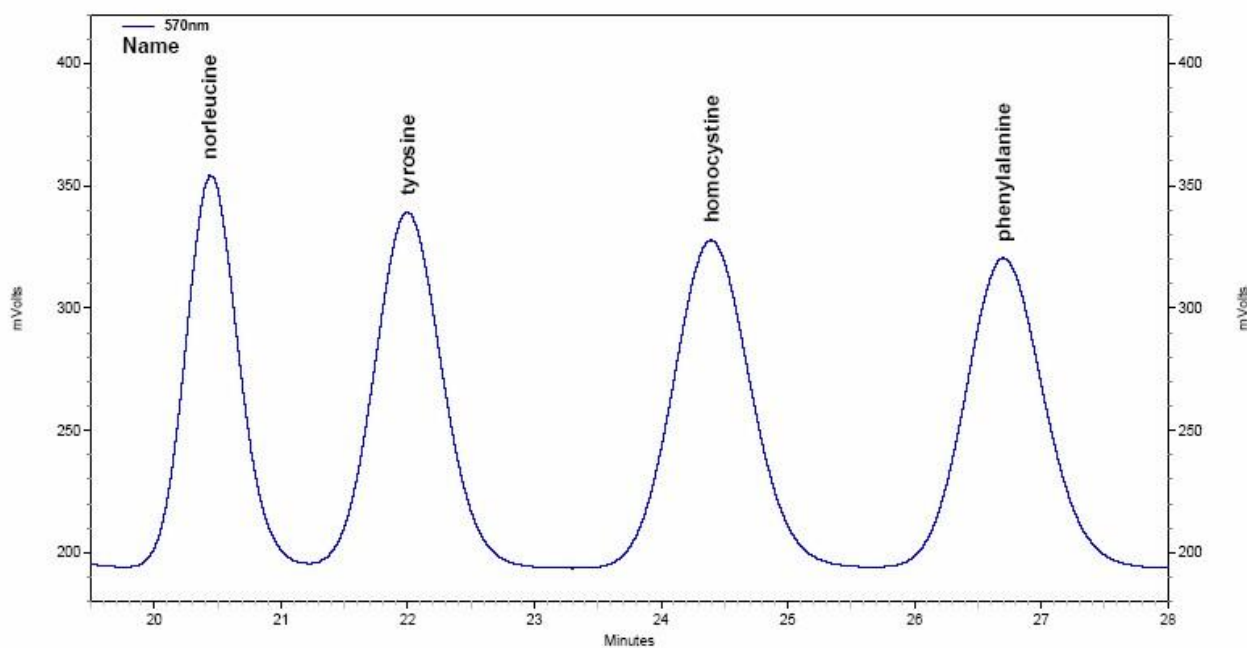
Using the Biochrom 30+ Amino Acid Analyser, the levels of phenylalanine, tyrosine and homocystine can be determined quickly and accurately.

A shortened program developed on the Biochrom 30+ Amino Analyser allows the separation and quantification of phenylalanine and tyrosine using norleucine as the internal standard.

The separation is carried out using a 20 cm x 4.6 mm High Performance physiological column (p/n 80-6002-48) using Lithium Buffer 3 predominantly. The Biochrom Physiological Standard p/n 80-6002-80 was used as reference material.

The program enables 25 analyses to be performed a day. In addition of phenylalanine, tyrosine and homocystine are also well resolved.

Physiological standard (10 nmol/20uL except Homocystine 5 nmol/20uL)



Sample: Physiological Amino Acid Standard Amount Loaded: 10 nmol

Column Type: PEEK Column Number: _____ Resin Batch: _____

Bed Length (mm): 200 Diameter (mm): 4.6 Instrument Serial Number: _____

Test Number: _____

Flow Rate (ml/h): Buffer 30 Nin 20
Back Pressure (bar): _____

	<u>Buffer</u>	<u>Molarity</u>	<u>pH</u>
Buffer 1 -	Lithium Buffer 1	0.2 M	2.80
Buffer 2 -	Lithium Buffer 2	0.3 M	3.00
Buffer 3 -	Lithium Buffer 3	0.5 M	3.15
Buffer 4 -	Lithium Buffer 4	0.9 M	3.50
Buffer 5 -	Lithium Buffer 5	1.65 M	3.55
Buffer 6 -	Lithium Regeneration Buffer 6	0.3 M	~12
Reagent	Ninhydrin Ultrasolve		

Nin Flow Rate: 20.0 ml/h

<u>No.</u>	<u>Time</u>	<u>Temp</u>	<u>Buffer</u>	<u>Pump</u>	<u>Nin</u>	<u>Rec</u>	<u>Commands</u>
1	01:00	70°C	4	25.0ml/h	ON	OFF	
2	00:00	70°C	4	25.0ml/h	ON	OFF	Reset
3	01:00	70°C	4	25.0ml/h	ON	OFF	Load
4	15:00	70°C	4	25.0ml/h	OFF	ON	
5	07:00	70°C	4	25.0ml/h	ON	ON	
6	05:00	80°C	6	25.0ml/h	ON	ON	
7	03:00	80°C	3	25.0ml/h	OFF	OFF	
8	02:00	80°C	0	OFF	OFF	OFF	
9	15:00	70°C	3	25.0ml/h	OFF	OFF	
10	02:00	70°C	4	25.0ml/h	ON	OFF	
11	02:00	70°C	4	25.0ml/h	ON	OFF	