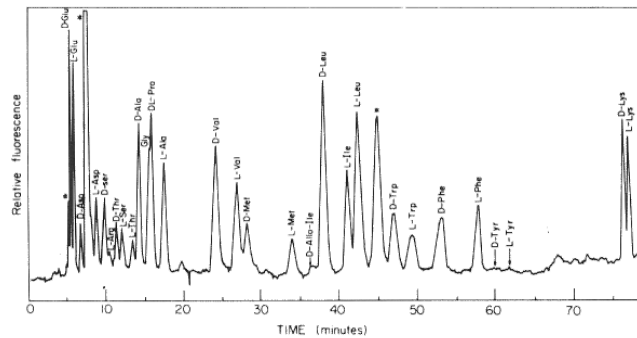


Application Number 105320  
 Method HPLC  
 Results



#### Legend:

Separation of almost all amino acids present in a protein hydrolyzate analyzed as their fluorescent DNS derivatives

D-Glu - D-glutamine  
 L-Glu - L-glutamine  
 D-Asp - D-aspartic acid  
 L-Asp - L-aspartic acid  
 D-Ser - D-serine  
 L-Arg - L-arginine  
 D-Thr - D-threonine  
 L-Ser - L-serine  
 L-Thr - L-threonine  
 D-Ala - D-alanine  
 Gly - glycine  
 DL-Pro - D,L-proline  
 L-Ala - L-alanine  
 D-Val - D-valine  
 L-Val - L-valine  
 D-Met - D-methionine  
 L-Met - L-methionine  
 D-Leu - D-leucine  
 L-Ile - L-isoleucine  
 L-Leu - L-leucine  
 D-Trp - D-tryptophan  
 L-Trp - L-tryptophan  
 D-Phe - D-phenylalanine

L-Phe - L-phenylalanine

D-Lys - D-lysine

L-Lys - L-lysine

\* indicate derivatization side-products (7 min:

DNS-OH, 45 min: DNS-amide)

- &gt; indicate compounds not present in the mixture

(DNS-D-allo-isoleucine) or

decomposed during the analysis (DNS-D,L-tyrosine)

## Substances

(D-Glu) D-glutamine; (L-Glu) L-glutamine; (D-Asp) D-aspartic acid; (L-Asp) L-aspartic acid; (D-Ser) D-serine; (L-Arg) L-arginine; (D-Thr) D-threonine; (L-Ser) L-serine; (L-Thr) L-threonine; (D-Ala) D-alanine; (Gly) glycine; (DL-Pro) D,L-proline; (L-Ala) L-alanine; (D-Val) D-valine; (L-Val) L-valine; (D-Met) D-methionine; (L-Met) L-methionine; (D-Leu) D-leucine; (L-Ile) L-isoleucine; (L-Leu) L-leucine; (D-Trp) D-tryptophan; (L-Trp) L-tryptophan; (D-Phe) D-phenylalanine; (L-Phe) L-phenylalanine; (D-Lys) D-lysine; (L-Lys) L-lysine

## Product(s)

Phase	REF	Webshop
NUCLEOSIL C18	720014.46	<a href="#">Shop now</a>

## Matrix

## Sample(s)

Derivatization to 5-dimethylaminonaphthalen-1-sulfonyl (DNS) derivatives

## Conditions

Eluent A: 0.3 mol/L sodium acetate, adjusted to pH 7.0 with glacial acetic acid, containing 2 mmol/L N,N-di-n-propyl-L-alanine (L-DPA) and 1 mmol/L cupric acetate

Eluent B: acetonitrile

Equilibration: 23.5 % B

Gradient: in 20 min from 23.5 to 25.1 % B, in 10 min to 26.8 % B, in 10 min to 28.5 % B, in 10 min to 31.7 % B, in 10 min to 35.6 % B, in 5 min to 40.0 % B

Flow rate: 0.8 mL/min

Detection	Fluorescence: excitation 340 nm, emission 425 nm
Note	
Author	Weinstein, S. et al.
Source	J. Chromatogr. 303 (1984) 244 - 250
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