Nº. 108

BIBLIOGRAFIA

Tema: Determinación de Glucosamina, Manitol, Sorbitol y Aspartamo

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v.I

Anal Biochem 1998 Jul 15;261(1):73-8

Simultaneous determination of monosaccharides in glycoproteins by capillary electrophoresis.

Soga T, Heiger DN

Yokogawa Analytical Systems, Inc., 2-11-13 Nakacho, Musashino-shi, Tokyo, 180-0006, Japan.

[Medline record in process]

A rapid, easy, and reproducible capillary electrophoretic method for the simultaneous determination of acidic, neutral, and amino sugars and sugar alcohols was developed. Underivatized mannuronic acid, glucuronic acid, galacturonic acid, N-glycolylneuraminic acid, N-acetylneuraminic acid, glucosamine, galactosamine, mannose, xylose, glucose, galactose, fucose, ribose, mannitol, sorbitol, xylitol, and inositol were simultaneously determined with indirect UV detection using 2,6-pyridinedicarboxylic acid as a background electrolyte. A highly alkaline pH condition was used in order to charge carbohydrates negatively and to promote migration toward the anode. Electroosmotic flow was reversed to the direction of the anode by adding cetyltrimethylammonium bromide to the electrolyte. The separation of the carbohydrates was investigated by optimizing the operating pH value and satisfactory resolution was obtained at pH 12.1. The relative standard deviations of the method for carbohydrates were between 0.02 and 0.33% for migration times and were greater than 2.7% for peak areas (n = 6). The minimum detectable level ranged from 23 to 71 &mgr;M with a 6-nl injection at a signal-to-noise ratio of 3. This method was applied to the composition analysis of monosaccharides in glycoprotein. After acid hydrolysis of fetuin under each optimum condition, sialo, neutral, and amino sugars were quantified under the same electrophoretic condition. Copyright 1998 Academic Press.

PMID: 9683514, UI: 98350003

Biochem J 1997 Jan 1;321 (Pt 1):239-46

Investigation on the mechanism by which fructose, hexitols and other compounds regulate the translocation of glucokinase in rat hepatocytes.

Niculescu L, Veiga-da-Cunha M, Van Schaftingen E

Laboratoire de Chimie Physiologique, Universite Catholique de Louvain, Brussels, Belgium.

In isolated hepatocytes in suspension, the effect of sorbitol but not that of fructose to increase the concentration of fructose 1-phosphate and to stimulate glucokinase was abolished by 2-hydroxymethyl-4-(4-N,N-dimethylamino-1-piperazino)-pyrimidine (SDI 158), an inhibitor of sorbitol dehydrogenase. In hepatocytes in primary culture, fructose was metabolized at approximately one-quarter of the rate of sorbitol, and was therefore much less potent than the polyol in increasing the concentration of fructose 1-phosphate and the translocation of glucokinase. In cultures, sorbitol, commercial mannitol, fructose, D-glyceraldehyde or high concentrations of glucose caused fructose 1-phosphate formation and glucokinase translocation in parallel. Commercial mannitol was contaminated by approx. 1% sorbitol, which accounted for its effects. The effects of sorbitol, fructose and elevated concentrations of glucose were partly inhibited by ethanol, glycerol and glucosamine. Mannoheptulose increased translocation without affecting fructose 1-phosphate concentration. Kinetic studies performed with recombinant human beta-cell glucokinase indicated that this sugar, in contrast with N-acetylglucosamine, binds to glucokinase competitively with the regulatory protein. All these observations indicate that translocation is promoted by agents that favour the dissociation of the glucokinase-regulatory-protein complex either by binding to the regulatory protein (fructose I-phosphate) or to glucokinase (glucose, mannoheptulose). They support the hypothesis that the regulatory protein of glucokinase acts as an anchor for this enzyme that slows down its release from digitonin-permeabilized cells.

PMID: 9003425, UI: 97157044

Biochem J 1986 Apr 1;235(1):225-36

The disaccharides formed by deaminative cleavage of N-deacetylated glycosaminoglycans.

Shaklee PN, Conrad HE

Chondroitin 4-sulphate, chondroitin 6-sulphate, dermatan sulphate and keratan sulphate were N-deacetylated by treatment with hydrazine and then cleaved with HNO2 at pH 4.0, and the resulting products were reduced with NaB3H4. This reaction sequence cleaved the glycosaminoglycans at their N-acetyl-D-glucosamine or N-acetyl-D-galactosamine residues, which were converted into 3H-labelled 2,5-anhydro-D-mannitol (AManR) or 2,5-anhydro-D-talitol (ATalR) residues respectively. The end-labelled disaccharides, composed of D-glucuronic acid (GlcA), L-iduronic acid (IdoA) or D-galactose (Gal) and one of the anhydrohexitols, were identified as follows: both chondroitin 4-sulphate and chondroitin 6-sulphate gave GlcA----ATalR(4-SO4), GlcA----ATalR(6-SO4), IdoA----ATalR (4-SO4) and GlcA(2-SO4)----ATalR(6-SO4); dermatan sulphate gave IdoA----ATalR(4-SO4), GlcA----ATalR(4-SO4), GlcA----ATalR(6-SO4)----IdoA(2-SO4)ATalR(4-SO4) and IdoA----ATalR (4,6-diSO4); keratan sulphate gave Gal(6-SO4)----AManR(6-SO4), Gal----AManR(6-SO4), Gal(6-SO4)----AManR and Gal----AManR. Several additional disaccharides were generated by treatment of the uronic acid-containing disaccharides with hydrazine to epimerize their uronic acid residues at C-5. A number of these disaccharides were found to be substrates for lysosomal sulphatases and glycuronidases. Methods were developed for the separation of all of the disaccharide products by h.p.l.c. The rate of N-deacetylation of chondroitin 4-sulphate by hydrazinolysis was significantly lower than the rate of N-deacetylation of chondroitin 6-sulphate or chondroitin. Dermatan sulphate was N-deacetylated at an intermediate rate. The relative amounts of disaccharides obtained from chondroitin 4-sulphate, chondroitin 6-sulphate and dermatan sulphate under optimum hydrazinolysis/deamination conditions were comparable with the amounts of the corresponding products released from the polymers by chondroitinase treatment.

PMID: 3741382, UI: 86295585

Electrophoresis 1996 Feb;17(2):391-5

High performance capillary electrophoresis method to characterize heparin and heparan sulfate disaccharides.

Karamanos NK, Vanky P, Tzanakakis GN, Hjerpe A

Department of Immunology, Microbiology, Pathology and Infectious Diseases, Huddinge University Hospital F-42, Sweden.

A rapid, sensitive and accurate high-performance capillary electrophoresis method is described for the determination of the sulfation pattern of heparin and heparan sulfate disaccharides. The analysis, performed after enzymic degradation of the polysaccharides with heparinase and heparinases II and III in combination, yields highly UV-absorbing delta-disaccharides. The separation is performed with reversed polarity using 15 mM phosphate buffer, pH 3.50. This method is superior to others since all known 12 disaccharides carrying N-acetylated, N-sulfated or unsubstituent glucosamine can be separated in a single run of 15 min. At the highest sensitivity the analysis consumes only a few femtograms of glycosaminoglycan and allows a determination of delta-disaccharides at the attomole level.

PMID: 8900948, UI: 97056608

J Chromatogr B Biomed Appl 1994 Jun 17;656(2):295-302

High-performance liquid chromatographic analysis of glycoamines in serum.

Kuo KC, Gehrke JC, Allen WC, Holsbeke M, Li Z, Glinsky GV, Zumwalt RW, Gehrke CW

BioSciences & Technology International, Inc., Columbia, MO 65202.

This report describes the development of an HPLC-UV method for studies of glycoamines and glycoamine-like compounds in normal human serum and osteosarcoma patients serum as potential biological markers of cancer. The glycoamines, a newly recognized class of endogenous, low-molecular-mass biopolymers, are conjugates of amino acids and sugar units, containing 5

to 29 amino acid and 1 to 17 sugar units. After ultrafiltration of serum samples, reversed-phase HPLC separation with diode-array detection was used to obtain standard profiles of serum ultrafiltrates below M(r) 10,000 in healthy subjects. These highly reproducible profiles utilized two-dimensional peak identification and were used to develop a statistical profile of the major glycoamine peaks in normal serum. This newly developed analytical method was subsequently used to address a key question: whether or not there is a single tumor-specific glycoamine or a family of tumor-specific glycoamines in cancer patient serum. Preliminary results suggest that this method can separate and detect glycoamines and glycoamine-like compounds in various types of cancer patients serum with a high degree of reproducibility on the basis of comparative two-dimensional identification of natural compounds and a panel of synthetic glycoamine analogs. Moreover, the method is useful for following the relative changes in the amount of a given glycoamine over an extended clinical time course. Initial results suggest that a glycoamine or glycoamine-like compound, GA-4.63, may have clinical utility in human osteosarcoma studies.

Publication Types:

Clinical trial

J Chromatogr 1992 May 29;600(2):279-87

Capillary zone electrophoresis of linear and branched oligosaccharides.

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Department of Chemistry, Oklahoma State University, Stillwater 74078-0447.

The electrophoretic behavior of derivatized linear and branched oligosaccharides from various sources was examined in capillary zone electrophoresis with polyether-coated fused-silica capillaries. Two UV-absorbing (also fluorescent) derivatizing agents (2-aminopyridine and 6-aminoquinoline) were utilized for the electrophoresis and sensitive detection of neutral oligosaccharides, e.g., N-acetylchitooligosaccharides, high-mannose glycans and xyloglucan oligosaccharides. The oligosaccharides labelled with 6-aminoquinoline yielded eight times higher signal than those tagged with 2-aminopyridine. Plots of logarithmic electrophoretic mobilities of labelled N-acetylchitooligosaccharides with 6-aminoquinoline or 2-aminopyridine versus the number of sugar residues in the homologous series yielded straight lines in the size range studied, the slopes of which were independent of the tagging functions. The slopes of these lines are referred to as the N-acetylglucosaminyl group mobility decrement. The oligosaccharides were better resolved in the presence of tetrabutylammonium bromide in the running electrolyte. Furthermore, the electrophoretic mobilities of branched oligosaccharides were indexed with respect to linear homooligosaccharides, an approach that may prove valuable in correlating and predicting the mobilities of complex oligosaccharides.

J Chromatogr 1989 May 30;490(2):293-9

Analysis of aspartylglucosamine at the picomole level by high-performance liquid chromatography.

Kaartinen V, Mononen I

Department of Clinical Chemistry, Kuopio University Central Hospital, Finland.

A sensitive method for quantitative analysis of aspartylglucosamine as its dabsyl chloride derivative by high-performance liquid chromatography is described. Precolumn-derivatized aspartylglucosamine and internal standard (carboxymethylcysteine) are separated on a reversed-phase column with a mobile phase consisting of phosphate buffer and acetonitrile and monitored by UV-VIS detection at 436 nm. Aspartylglucosamine acts in the assay like a polar amino acid, and it can be separated from interfering substances in urine with a retention time of ca. 13 min. Its detection limit is ca. 0.3 microM in water and 0.5-1.0 microM in urine and other biological samples, which permits its quantitation in normal urine, for example. The within-day coefficient of variation is less than 4.7% and the day-to-day coefficient of variation is less than 8.3%. The present method is applicable to the direct analysis of aspartylglucosamine in body fluids and tissues without any prepurification and, in combination with automated liquid chromatography, allows rapid assay of a large number of samples in the detection of aspartylglycosaminuria. The sensitivity of the assay also allows direct quantitation of aspartylglucosamine in normal urine and leukocytes of aspartylglycosaminuria patients, and may thus be used in metabolic studies of the compound.

WinSPIRS 2.1

No.	Registros	Solicitud
1	131	glucosamine
2	130	aspartame
3	300	mannitol
4	203	sorbitol
5	0	glucosamine and aspartame and mannitol and sorbitol
6	131	glucosamine
7	130	aspartame
8	0	glucosamine and aspartame
9	131	glucosamine
10	300	mannitol
11	4	glucosamine and mannitol
12	131	glucosamine
13	203	sorbitol
14	2	glucosamine and sorbitol
15	131	glucosamine
16	45418	hplc
* 17	42	glucosamine and hplc
18	131	glucosamine
19	45418	hplc
20	29850	pharmaceutical
21	3024	forms
22	0	glucosamine and hplc and pharmaceutical forms
23	131	glucosamine
24	45418	hplc
25	29850	pharmaceutical
26	1	glucosamine and hplc and pharmaceutical

Registro 1 de 42 - Analytical Abstracts
TI: A method to quantitate total sialic acid, glucosamine, and galactosamine in blood serum and glycoconjugates by HPLC.
AU: Makatsori,-E; Karamanos,-NK; Anastassiou,-ED; Hjerpe,-A; Tsegenidis,-T
SO: J-Liq-Chromatogr-Relat-Technol. Nov 1998; 21(19): 3031-3045
JN: Journal-of-Liquid-Chromatography-and-Related-Technologies
LA: English
PT: Journal
IM: blood-serum-M: detmn. of galactosamine, glucosamine and sialic acid, and their glycoconjugates in, by HPLC

Registro 2 de 42 - Analytical Abstracts
TI: Characterization of heparin oligosaccharide mixtures as ammonium salts using electrospray mass spectrometry
AU: Chai,-W-G; Luo,-J-L; Lim,-C-K; Lawson,-AM
SO: Anal-Chem. 15 May 1998; 70(10): 2060-2066
JN: Analytical-Chemistry
LA: English
PT: Journal

Registro 3 de 42 - Analytical Abstracts
TI: Analysis of the Morgan-Elson chromogens by high-performance liquid chromatography.
AU: Roden,-L; Yu,-H; Jin,-J; Ekborg,-G; Estock,-A; Krishna,-NR; Livant,-P
SO: Anal-Biochem. 15 Dec 1997; 254(2): 240-248
JN: Analytical-Biochemistry
LA: English
PT: Journal

Registro 4 de 42 - Analytical Abstracts
TI: HPLC determination of the sugar composition of the glycans on the cationic peanut peroxidase.
AU: Sun,-Y; Lige,-B; van-Huystee,-RB
SO: J-Agric-Food-Chem. Nov 1997; 45(11): 4196-4200
JN: Journal-of-Agricultural-and-Food-Chemistry
LA: English
PT: Journal
IM: glycans-M: detmn. of monosaccharides in cationic peanut peroxidase, by HPLC

Registro 5 de 42 - Analytical Abstracts
TI: Quantitative determination of amino-acid levels in neutral and glucosamine-containing carbohydrate polymers.
AU: Palace,-GP; Phoebe,-CH,-Jr
SO: Anal-Biochem. 15 Jan 1997; 244(2): 393-403
JN: Analytical-Biochemistry
LA: English
PT: Journal
IM: carbohydrates-M: detmn. of amino-acids in polymeric, by HPLC

Registro 6 de 42 - Analytical Abstracts
TI: High-performance liquid-chromatographic characterization of two lichen lectins with arginase

activity differing in their glycosyl moiety.
AU: Molina,-MC; Vicente,-C
SO: J-Liq-Chromatogr-Relat-Technol. Jul 1996; 19(13): 2101-2115
JN: Journal-of-Liquid-Chromatography-and-Related-Technologies
LA: English
PT: Journal
IM: Xanthoria-parietina-M: characterization of arginase-activity lectins in, by HPLC

Registro 7 de 42 - Analytical Abstracts
TI: Detection of glucosamine in the acid hydrolysis solution of humic substances.
AU: Jahnel,-JB; Frimmel,-FH
SO: Fresenius'-J-Anal-Chem. Apr 1996; 354(7-8): 886-888
JN: Fresenius'-Journal-of-Analytical-Chemistry
LA: English
PT: Journal
IM: humic-substances-M: detmn. of amino-acids and glucosamine in hydrolysates of, by HPLC

Registro 8 de 42 - Analytical Abstracts
TI: High-performance liquid-chromatographic analysis of hexosamines, hexosaminitols, N-acetylhexosamines and N-acetylhexosaminitols by ultra-violet and fluorescence detection at picomole levels.
AU: Zhang,-ZD; Zhang,-RE; Liu,-GQ
SO: J-Chromatogr,-A. 12 Apr 1996; 730(1-2): 107-114
JN: Journal-of-Chromatography,-A
LA: English
PT: Journal

Registro 9 de 42 - Analytical Abstracts
TI: Amino-acid and amino-sugar determination by derivatization with 6-aminoquinolyl-N-hydroxysuccinimidyl carbamate followed by high-performance liquid chromatography and fluorescence detection.
AU: Diaz,-J; Lliberia,-JL; Comellas,-L; Broto-Puig,-F
SO: J-Chromatogr,-A. 5 Jan 1996; 719(1): 171-179
JN: Journal-of-Chromatography,-A
LA: English
PT: Journal

Registro 10 de 42 - Analytical Abstracts
TI: Analysis of intact hopanoids and other lipids from the bacterium Zymomonas mobilis by high-performance liquid chromatography.
AU: Moreau,-RA; Powell,-MJ; Osman,-SF; Whitaker,-BD; Fett,-WF; Roth,-L; O'Brien,-DJ
SO: Anal-Biochem. 1 Jan 1995; 224(1): 293-301
LA: English
PT: Journal
IM: Zymomonas-mobilis-M: detmn. of hopanoids and lipids in, by HPLC;
micro-organisms-M: detmn. of hopanoids and lipids in, by HPLC

Registro 11 de 42 - Analytical Abstracts
TI: Chromatographic separation of 1-phenyl-3-methyl-5-pyrazolone-derivatized neutral, acidic and basic aldoses.
AU: Strydom,-DJ
SO: J-Chromatogr-A. 26 Aug 1994; 678(1): 17-23
LA: English
PT: Journal
IM: glycoproteins-M: sepn. of reducing monosaccharides in, by HPLC

Registro 12 de 42 - Analytical Abstracts
TI: Silica-based iminodiacetic acid bonded phase for HPLC of sugars, sugar alcohols and amino-sugars.
AU: Corradini,-C; Cristalli,-A; Fabbri,-E
SO: Ann-Chim (Rome). 1994; 84(5-6): 249-259
LA: English
PT: Journal

Registro 13 de 42 - Analytical Abstracts
TI: Quantitative determination of monosaccharides in glycoproteins by high-performance liquid chromatography with highly sensitive fluorescence detection.
AU: Anumula,-KR
SO: Anal-Biochem. 1 Aug 1994; 220(2): 275-283
LA: English
PT: Journal
IM: glycoproteins-M: detmn. of monosaccharides in, by HPLC;
fetuins-M: detmn. of monosaccharides in, by HPLC;
immunoglobulin-G-M: detmn. of monosaccharides in recombinant, by HPLC

Registro 14 de 42 - Analytical Abstracts
TI: Benzoylation of sugars, polyols and amino-acids in biological fluids for high-performance liquid-chromatographic analysis.
AU: Oehlke,-J; Brudel,-M; Blasig,-IE
SO: J-Chromatogr-B,-Biomed-Appl. 22 Apr 1994; 655(1): 105-111
LA: English
PT: Journal
IM: biological-fluids-M: detmn. of amino-acids, polyols and sugars in, by HPLC

Registro 15 de 42 - Analytical Abstracts
TI: High-performance liquid-chromatographic determination of neutral and amino monosaccharides by ultra-violet and fluorescence detection of sugar 9-fluorenylmethoxycarbonyl hydrazones and

9-fluorenylmethoxycarbonyl amino sugars at picomole and sub-picomole levels.
AU: Zhang,-RN; Zhang,-ZD; Liu,-GQ; Hidaka,-Y; Shimonishi,-Y
SO: J-Chromatogr. 27 Aug 1993; 646(1): 45-52
LA: English
PT: Journal
IM: glycoproteins-M: detmn. of amino and neutral monosaccharides in, by HPLC

Registro 16 de 42 - Analytical Abstracts
TI: Development of a highly sensitive fluorescence reaction detection system for liquid-chromatographic analysis of reducing carbohydrates.
AU: Yamauchi,-S; Nakai,-C; Nimura,-N; Kinoshita,-T; Hanai,-T
SO: Analyst (London). Jul 1993; 118(7): 773-776
LA: English
PT: Journal

Registro 17 de 42 - Analytical Abstracts
TI: High-performance liquid-chromatographic quantitation of phenylthiocarbamyl muramic acid and glucosamine from bacterial cell walls.
AU: Hagen,-SR
SO: J-Chromatogr. 19 Feb 1993; 632(1-2): 63-68
LA: English
PT: Journal
IM: biological-cells-M: detmn. of amino-sugars in walls of bacterial, by HPLC;
micro-organisms-M: detmn. of amino-sugars in cell walls of, by HPLC

Registro 18 de 42 - Analytical Abstracts
TI: Soluble sugar composition of peanut seed.
AU: Basha,-SM
SO: J-Agric-Food-Chem. May 1992; 40(5): 780-783
LA: English
PT: Journal
IM: peanut-M: detmn. of soluble sugars in seed of, by HPLC

Registro 19 de 42 - Analytical Abstracts
TI: Analysis of glycosaminoglycan chains from different proteoglycan populations in human embryonic skin fibroblasts.
AU: Schmidtchen,-A; Fransson,-L-A
SO: Eur-J-Biochem. 1 Sep 1992; 208(2): 537-546
LA: English
PT: Journal
IM: fibroblasts-M: detmn. of glycosaminoglycan chains from proteoglycan populations in embryonic skin, by gel chromatography, ion-exchange HPLC
and gel electrophoresis

Registro 20 de 42 - Analytical Abstracts
TI: Quantitative determination of phenyl isothiocyanate-derivatized amino sugars and amino sugar alcohols by high-performance liquid chromatography.
AU: Rao,-AKR; Taylor,-PB
SO: Anal-Biochem. 15 Aug 1991; 197(1): 113-120
LA: English
PT: Journal

Registro 21 de 42 - Analytical Abstracts
TI: Use of high-performance liquid chromatography in the identification and quantification of cell wall and lipopolysaccharide components in gram negative bacteria.
AU: Williams,-JW; Saravolac,-EG; Taylor,-NF
SO: Microchem-J. Feb 1991; 43(1): 2-9
LA: English
PT: Journal
IM: peptidoglycans-M: detmn. of components of, by HPLC;
Pseudomonas-putida-M: detmn. of cell wall components of, by HPLC;
micro-organisms-M: detmn. of cell wall components of, by HPLC

Registro 22 de 42 - Analytical Abstracts
TI: Enzymic method for determination of the degree of deacetylation of chitosan.
AU: Nanjo,-F; Katsumi,-R; Sakai,-K
SO: Anal-Biochem. Mar 1991; 193(2): 164-167
LA: English
PT: Journal
IM: chitosan-M: [9012-76-4]. detmn. of degree of deacetylation of, enzymic hydrolysis for

Registro 23 de 42 - Analytical Abstracts
TI: Detection of aspartylglycosaminuria using urine specimens recovered from absorbent filter paper.
AU: Kaartinen,-V; Mononen,-I
SO: Clin-Chim-Acta. 31 Oct 1990; 191(1-2): 15-20
LA: English
PT: Journal
IM: urine-M: detection of beta-aspartylglucosamine in dried, by HPLC

Registro 24 de 42 - Analytical Abstracts
TI: Partial purification and HPLC activity determination of chicken liver acetylcoenzyme A glucosamine acetyltransferase.
AU: Mannens,-GSJ; Slegers,-GAS
SO: Chim-Oggi. Jul-Aug 1990; 8(7-8): 23-28
LA: English
PT: Journal

IM: liver-M: assay of glucosamine acetyltransferase in, by HPLC

Registro 25 de 42 - Analytical Abstracts
TI: Adaptation of a thermospray liquid chromatography - mass spectrometry interface for use with alkaline anion-exchange liquid chromatography of carbohydrates.
AU: Simpson,-RC; Fenselau,-CC; Hardy,-MR; Townsend,-RR; Lee,-YC; Cotter,-RJ
SO: Anal-Chem. 1 Feb 1990; 62(3): 248-252
LA: English
PT: Journal

Registro 26 de 42 - Analytical Abstracts
TI: High-performance liquid-chromatographic identification of disaccharides generated from heparan sulphate isomers using heparitinases.
AU: Murata,-K; Yokoyama,-Y; Yoshida,-K
SO: J-Chromatogr,-Biomed-Appl. 10 Nov 1989; 88(1 (J. Chromatogr., 496)): 27-38
LA: English
PT: Journal

Registro 27 de 42 - Analytical Abstracts
TI: Analysis of natural and modified amino-acids and hexosamines by reversed-phase high-performance liquid chromatography.
AU: Gupta,-R; Jentoft,-N
SO: J-Chromatogr. 19 Jul 1989; 474(2): 411-417
LA: English
PT: Journal

Registro 28 de 42 - Analytical Abstracts
TI: Analysis of aspartylglucosamine at the picomole level by high-performance liquid chromatography.
AU: Kaartinen,-V; Mononen,-I
SO: J-Chromatogr,-Biomed-Appl. 30 May 1989; 82(2 (J. Chromatogr., 490)): 293-299
LA: English
PT: Journal
IM: leucocytes-M: detmn. of aspartylglucosamine in, by HPLC as dabsyl derivative; urine-M: detmn. of aspartylglucosamine in, by HPLC as dabsyl derivative

Registro 29 de 42 - Analytical Abstracts
TI: High-performance liquid-chromatographic analysis of galactosamine, glucosamine, glucosaminitol and galactosaminitol.
AU: Cheng,-P-W
SO: Anal-Biochem. Dec 1987; 167(2): 265-269
LA: English
PT: Journal

Registro 30 de 42 - Analytical Abstracts
TI: Analysis of OPA [phthalaldehyde]-derivatized amino-sugars in tobacco by high-performance liquid chromatography with fluorimetric detection.
AU: Dominguez,-LM; Dunn,-RS
SO: J-Chromatogr-Sci. Oct 1987; 25(10): 468-471
LA: English
PT: Journal
IM: tobacco-M: detmn. of amino-sugars in, by HPLC as phthalaldehyde derivatives

Registro 31 de 42 - Analytical Abstracts
TI: Reliability of the use of toluene-p-sulphonic acid for simultaneous hydrolysis and quantitation of both N-acetylglucosamine and amino-acids in human transferrins.
AU: Van-Eijk,-HG; Van-Noort,-WL
SO: Clin-Chim-Acta. 30 Jun 1986; 157(3): 305-310
LA: English
PT: Journal
IM: transferrin-M: detmn. of N-acetylglucosamine and amino-acids in human, toluene-p-sulphonic acid in HPLC

Registro 32 de 42 - Analytical Abstracts
TI: Identification of N-acetylhexosamines produced by enzymes of the N-acetylneuraminic acid metabolic pathway by borate complex anion-exchange chromatography of the corresponding N-acetylhexosaminitols.
AU: Scocca,-JR
SO: Anal-Biochem. Jul 1986; 156(1): 61-66
LA: English
PT: Journal
IM: fibroblasts-M: detmn. of N-acetylgalactosamine, N-acetylglucosamine and N-acetylmannosamine in human, by anion-exchange chromatography as N-acetylhexosaminitols

Registro 33 de 42 - Analytical Abstracts
TI: Rapid method for determining desmosine, isodesmosine, 5-hydroxylysine, tryptophan, lysinoalanine and the amino-sugars in proteins and tissues.
AU: Zarkadas,-CG; Zarkadas,-GC; Karatzas,-CN; Khalili,-AD; Nguyen,-Q
SO: J-Chromatogr,-Biomed-Appl. 28 May 1986; 51(1 (J. Chromatogr., 378)): 67-76
LA: English
PT: Journal

Registro 34 de 42 - Analytical Abstracts
TI: Lectin affinity high-performance liquid chromatography columns for the resolution of nucleotide sugars.
AU: Harada,-H; Kamei,-M; Yui,-S; Koyama,-F
SO: J-Chromatogr. 14 Mar 1986; 355(1): 291-295

LA: English
PT: Journal

Registro 35 de 42 - Analytical Abstracts
TI: Rapid resolution of nucleotide sugars by lectin affinity high-performance liquid chromatography.
AU: Tokuda,-M; Kamei,-M; Yui,-S; Koyama,-F
SO: J-Chromatogr. 26 Apr 1985; 323(2): 434-438
LA: English
PT: Journal

Registro 36 de 42 - Analytical Abstracts
TI: Sensitive assay for amino-sugars using capillary gas chromatography with nitrogen-selective detection.
AU: Whenham,-RJ
SO: J-Chromatogr. 2 Nov 1984; 303(2): 380-385
LA: English
PT: Journal
IM: Plasmodiophora-brassicae-M: analysis of amino-sugars of spore wall of, by g.c. with nitrogen-selective detection

Registro 37 de 42 - Analytical Abstracts
TI: Sensitive monitoring of hexosamines in high-performance liquid chromatography by fluorimetric post-column labelling using the pentane-2,4-dione - formaldehyde system.
AU: Honda,-S; Konishi,-T; Suzuki,-S; Kakehi,-K; Ganno,-S
SO: J-Chromatogr. 23 Dec 1983; 281340-344
LA: English
PT: Journal

Registro 38 de 42 - Analytical Abstracts
TI: Automated analysis of hexosamines by high-performance liquid chromatography with photometric and fluorimetric post-column labelling using 2-cyanoacetamide.
AU: Honda,-S; Konishi,-T; Suzuki,-S; Takahashi,-M; Kakehi,-K; Ganno,-S
SO: Anal-Biochem. 15 Oct 1983; 134(2): 483-488
LA: English
PT: Journal
IM: albumin-M: detmn. of hexosamines in, by h.p.l.c.;
transferrin-M: detmn. of hexosamines in, by h.p.l.c.;
chondroitin-4-sulphate-M: [24967-93-9]. detmn. of hexosamines in, by h.p.l.c.;
chondroitin-6-sulphate-M: [25322-46-7]. detmn. of hexosamines in, by h.p.l.c.;
urine-M: detmn. of hexosamines in, by h.p.l.c.

Registro 39 de 42 - Analytical Abstracts
TI: Separation and analysis of 4'-epimeric UDP-sugars by borate high-performance liquid chromatography.
AU: Weckbecker,-G; Keppler,-DOR
SO: Anal-Biochem. 15 Jul 1983; 132(2): 405-412
LA: English
PT: Journal

Registro 40 de 42 - Analytical Abstracts
TI: Fractionation of oligosaccharides containing N-acetylated amino-sugars by reversed-phase high-pressure liquid chromatography.
AU: Blumberg,-K; Liniere,-F; Pustilnik,-L; Bush,-CA
SO: Anal-Biochem. 1982; 119(2): 407-412
LA: English
PT: Journal

Registro 41 de 42 - Analytical Abstracts
TI: Separation and quantitative determination of galactosamine and glucosamine at the nanogram level by sulphonyl chloride reaction and high-performance liquid chromatography.
AU: Hjerpe,-A; Antonopoulos,-CA; Classon,-B; Engfeldt,-B
SO: J-Chromatogr. 1980; 202(3): 453-459
LA: English
PT: Journal

Registro 42 de 42 - Analytical Abstracts
TI: Two-column system for determination of glucosamine, galactosamine and amino-acids on a Beckman 121MB amino-acid analyser: separation of anomers of glucosamine and galactosamine.
AU: Del-Valle,-U; Shively,-JE
SO: Anal-Biochem. 1979; 96(1): 77-83
LA: English
PT: Journal

WinSPIRS 2.1

No.	Registros	Solicitud
1	131	glucosamine
2	130	aspartame
3	300	mannitol
4	203	sorbitol
5	0	glucosamine and aspartame and mannitol and sorbitol
6	131	glucosamine
7	130	aspartame
8	0	glucosamine and aspartame
9	131	glucosamine
10	300	mannitol
11	4	glucosamine and mannitol
12	131	glucosamine
13	203	sorbitol
14	2	glucosamine and sorbitol
15	131	glucosamine
16	45418	hplc
17	42	glucosamine and hplc
18	131	glucosamine
19	45418	hplc
20	29850	pharmaceutical
21	3024	forms
22	0	glucosamine and hplc and pharmaceutical forms
23	131	glucosamine
24	45418	hplc
25	29850	pharmaceutical
26	1	glucosamine and hplc and pharmaceutical
27	130	aspartame
28	300	mannitol
29	0	aspartame and mannitol
30	130	aspartame
31	203	sorbitol
32	0	aspartame and sorbitol
33	130	aspartame
34	45418	hplc
* 35	67	aspartame and hplc

Registro 1 de 6 - Analytical Abstracts
TI: Simultaneous determination of amoxycillin and clavulanic acid in pharmaceutical products by HPLC with beta-cyclodextrin stationary phase.
AU: Tsou,-T-L; Wu,-J-R; Young,-C-D; Wang,-T-M
SO: J-Pharm-Biomed-Anal. May 1997; 15(8): 1197-1205
JN: Journal-of-Pharmaceutical-and-Biomedical-Analysis
LA: English
PT: Journal
IM: pharmaceutical-preparations-M: detmn. of amoxycillin and clavulanic acid in, by HPLC

Registro 2 de 6 - Analytical Abstracts
TI: Validated capillary electrophoresis method for the assay of a range of basic drugs.
AU: Altria,-KD; Frake,-P; Gill,-I; Hadgett,-T; Kelly,-MA; Rudd,-DR
SO: J-Pharm-Biomed-Anal. Jul 1995; 13(8): 951-957
LA: English
PT: Journal

Registro 3 de 6 - Analytical Abstracts
TI: Selection of buffers and of an ion-pairing agent for thermospray liquid-chromatographic - mass-spectrometric analysis of ionic compounds.
AU: Duchateau,-ALL; Munsters,-BHM; Kwakkenbos,-GTC; Van-Leuken,-RGJ
SO: J-Chromatogr. 9 Aug 1991; 552(1-2): 605-612
LA: English
PT: Journal

Registro 4 de 6 - Analytical Abstracts
TI: Methods for analysing aspartame.
AU: Verstappen,-TA; Miltenburg,-SMS
SO: Voedingsmiddelentechnologie. 1989; 22(18): 26-30
LA: Dutch
PT: Journal

Registro 5 de 6 - Analytical Abstracts
TI: Ion-pair high-performance liquid-chromatographic analysis of aspartame and related products.
AU: Verzella,-G; Bagnasco,-G; Mangia,-A

SO: J-Chromatogr. 6 Dec 1985; 349(1): 83-89
LA: English
PT: Journal
COP: Copyright: The Royal Society of Chemistry

Registro 6 de 6 - Analytical Abstracts
TI: High-performance liquid-chromatographic analysis of aspartame.
AU: Verzella,-G; Mangia,-A
SO: J-Chromatogr. 18 Oct 1985; 346417-422
LA: English
PT: Journal
IM: aspartame-M: [22839-47-0]. analysis of, by HPLC
COP: Copyright: The Royal Society of Chemistry

WinSPIRS 2.1

No.	Registros	Solicitud
1	131	glucosamine
2	9286	uv
3	8	glucosamine and uv
4	131	glucosamine
5	300	mannitol
6	9286	uv
7	0	glucosamine and mannitol and uv
8	131	glucosamine
9	203	sorbitol
10	9286	uv
11	0	glucosamine and sorbitol and uv
12	203	sorbitol
13	9286	uv
14	8	sorbitol and uv
15	300	mannitol
16	203	sorbitol
17	9286	uv
* 18	2	mannitol and sorbitol and uv

Registro 1 de 1 - Analytical Abstracts

TI: Measurement of hydrogen peroxide in biological samples containing high levels of ascorbic acid.

AU: Bleau,-G; Giasson,-C; Brunette,-I

AD: bleaug@ere.umontreal.ca, Dept. Obstetrics and Gynaecol., Univ. Montreal, Montreal, PQ H1T 2M4, Canada

CP: Canada

SO: Anal-Biochem. 1 Oct 1998; 263(1): 13-17

JN: Analytical-Biochemistry

IS: 0003-2697

CO: ANBCA2

PY: 1998

LA: English

PT: Journal

AB: Aqueous humor (50 micro l) was added to 950 micro l ferrous oxidation in xylenol orange containing 100micro M-xylenol orange, 250micro M-ammonium ferrous sulfate, 100micro M-D-sorbitol and 25mM-sulfuric acid according to Wolff (Methods Enzymol., 1994, 233, 182). The assay was performed with and without a N2 atmosphere and with 0-20micro M-ascorbic acid. After 30 min, the absorbance was measured at 560 nm. Calibration graphs were linear from 0-5micro M-H2O2, with a detection limit of <5micro M and recovery from >=85%.

IA: hydrogen-peroxide-A: [7722-84-1]. detmn. of, in aqueous humor, by spectrophotometry

IM: aqueous-humor-M: detmn. of hydrogen peroxide in, by spectrophotometry

IC: spectrophotometry,-absorption,-ultra-violet-visible-(UV-spectrophotometry)-C: in detmn. of hydrogen peroxide, ascorbic acid interference in

SC: F-Clinical-and-Biochemical-Analysis

SS: 10000

CR: C3

AN: 6103F00021

UD: 6103

WinSPIRS 2.1

No.	Registros	Solicitud
1	131	glucosamine
2	130	aspartame
3	300	mannitol
4	203	sorbitol
5	0	glucosamine and aspartame and mannitol and sorbitol
6	131	glucosamine
7	130	aspartame
8	0	glucosamine and aspartame
9	131	glucosamine
10	300	mannitol
11	4	glucosamine and mannitol
12	131	glucosamine
13	203	sorbitol
14	2	glucosamine and sorbitol
15	131	glucosamine
16	45418	hplc
17	42	glucosamine and hplc
18	131	glucosamine
19	45418	hplc
20	29850	pharmaceutical
21	3024	forms
22	0	glucosamine and hplc and pharmaceutical forms
23	131	glucosamine
24	45418	hplc
25	29850	pharmaceutical
26	1	glucosamine and hplc and pharmaceutical
27	130	aspartame
28	300	mannitol
29	0	aspartame and mannitol
30	130	aspartame
31	203	sorbitol
32	0	aspartame and sorbitol
33	130	aspartame
34	45418	hplc
* 35	67	aspartame and hplc

Registro 1 de 9 - Analytical Abstracts
TI: Simultaneous determination of amoxycillin and clavulanic acid in pharmaceutical products by HPLC with beta-cyclodextrin stationary phase.
AU: Tsou,-T-L; Wu,-J-R; Young,-C-D; Wang,-T-M
SO: J-Pharm-Biomed-Anal. May 1997; 15(8): 1197-1205
JN: Journal-of-Pharmaceutical-and-Biomedical-Analysis
LA: English
PT: Journal
IM: pharmaceutical-preparations-M: detmn. of amoxycillin and clavulanic acid in, by HPLC
COP: Copyright: The Royal Society of Chemistry

Registro 2 de 9 - Analytical Abstracts
TI: Validated capillary electrophoresis method for the assay of a range of basic drugs.
AU: Altria,-KD; Frake,-P; Gill,-I; Hadgett,-T; Kelly,-MA; Rudd,-DR
SO: J-Pharm-Biomed-Anal. Jul 1995; 13(8): 951-957
LA: English
PT: Journal
COP: Copyright: The Royal Society of Chemistry

Registro 3 de 9 - Analytical Abstracts
TI: Selection of buffers and of an ion-pairing agent for thermospray liquid-chromatographic - mass-spectrometric analysis of ionic compounds.
AU: Duchateau,-ALL; Munsters,-BHM; Kwakkenbos,-GTC; Van-Leuken,-RGJ
SO: J-Chromatogr. 9 Aug 1991; 552(1-2): 605-612
LA: English
PT: Journal
COP: Copyright: The Royal Society of Chemistry

Registro 4 de 9 - Analytical Abstracts
TI: Separation of aspartame and its precursor stereoisomers by chiral chromatography.
AU: Lin,-S-L; Chen,-S-T; Wu,-S-H; Wang,-K-T
SO: J-Chromatogr. 1 Mar 1991; 540(1-2): 392-396
LA: English
PT: Journal
COP: Copyright: The Royal Society of Chemistry

Registro 5 de 9 - Analytical Abstracts
TI: Capillary electrophoresis of synthetic molecules.
AU: Schlabach,-T; Powers,-J

SO: Int-Lab. Jun 1991; 26-28
LA: English
PT: Journal
IM: beverages,-non-alcoholic-M: detmn. of aspartame, benzoic acid and caffeine in, by capillary electrophoresis
COP: Copyright: The Royal Society of Chemistry

Registro 6 de 9 - Analytical Abstracts
TI: Methods for analysing aspartame.
AU: Verstappen,-TA; Miltenburg,-SMS
SO: Voedingsmiddelentechnologie. 1989; 22(18): 26-30
LA: Dutch
PT: Journal
COP: Copyright: The Royal Society of Chemistry

Registro 7 de 9 - Analytical Abstracts
TI: Reversed-phase high-performance liquid-chromatographic separation of aspartame diastereomeric decomposition products.
AU: Gaines,-SM; Bada,-JL
SO: J-Chromatogr. 27 Feb 1987; 389(1): 219-225
LA: English
PT: Journal
COP: Copyright: The Royal Society of Chemistry

Registro 8 de 9 - Analytical Abstracts
TI: Ion-pair high-performance liquid-chromatographic analysis of aspartame and related products.
AU: Verzella,-G; Bagnasco,-G; Mangia,-A
SO: J-Chromatogr. 6 Dec 1985; 349(1): 83-89
LA: English
PT: Journal
COP: Copyright: The Royal Society of Chemistry

Registro 9 de 9 - Analytical Abstracts
TI: High-performance liquid-chromatographic analysis of aspartame.
AU: Verzella,-G; Mangia,-A
SO: J-Chromatogr. 18 Oct 1985; 346417-422
LA: English
PT: Journal
IM: aspartame-M: [22839-47-0]. analysis of, by HPLC
COP: Copyright: The Royal Society of Chemistry