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(21) International Application Number: PCT/US99/26989 (22) International Filing Date: 12 November 1999 (12.11.99) (30) Priority Data: 60/108,099 12 November 1998 (12.11.98) US (71) Applicant: GENZYME CORPORATION [US/US]; 15 Pleasant Street Connector, P.O. Box 9322, Framingham, MA 01701-9322 (US). (72) Inventor: SEMAN, Leo; 37 Ashwood Avenue, Salem, NH 03079 (US). (74) Agent: TEGFELDT, Jennifer; Genzyme Corporation, 15 Pleasant Street Connector, P.O. Box 9322, Framingham, MA 01701-9322 (US).		(81) Designated States: AU, CA, JP, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> (88) Date of publication of the international search report: 13 July 2000 (13.07.00)
(54) Title: A METHOD FOR THE DETERMINATION OF HOMOCYSTEINE (57) Abstract The invention relates to a method for determining homocysteine concentration in samples in which homocysteine is condensed using an enzyme cystathionine β synthase to form cystathionine. Pyruvate and/or ammonia are released from cystathionine by action of an enzyme, cystathionine β lyase, and homocysteine is regenerated. The release of pyruvate and/or ammonia can be correlated to the concentration of homocysteine present in the sample.		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/26989

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N33/68 C12Q1/527

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, A	WO 99 05311 A (LENZ MARTIN ;ANTICANCER INC (US); PERRY ANDREW W (US); TAN YUYING) 4 February 1999 (1999-02-04) page 27, line 5, paragraph 2 - line 18 ---	1,8,16
A	WO 98 07872 A (CAMPBELL ROBERT STEWART ;COOMBS GRAHAM HERBERT (GB); UNIV GLASGOW) 26 February 1998 (1998-02-26) page 3, line 14, paragraph 5 - line 20 page 11, line 7, paragraph 3 -page 14, paragraph 6 page 32 -page 35; example 9 --- -/--	1,8,16

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

14 April 2000

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Hart-Davis, J

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PCT/US 99/26989

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	T FISKESTRAND, H REFSUM, G KVALHEIM, P M UELAND: "Homocysteine and Other Thiols in Plasma and Urine: Automated Determination and Sample Stability" CLINICAL CHEMISTRY, vol. 39, no. 2, 1993, pages 263-271, XP002135757 cited in the application the whole document ---	
A	F FRANTZEN, A L FAAREN, I ALFHEIM, A K NORDHEI: "Enzyme conversion immunoassay for determining total homocysteine in plasma or serum" CLINICAL CHEMISTRY, vol. 44, no. 2, February 1998 (1998-02), pages 311-316, XP002135758 cited in the application abstract ---	
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/26989

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