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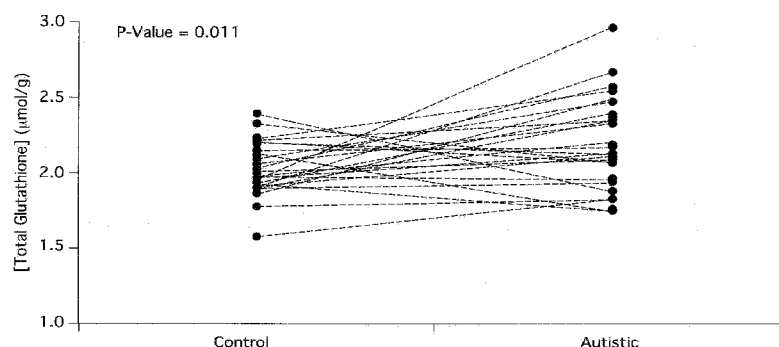
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(54) **Title:** ACCURATE MEASUREMENT OF GLUTATHIONE FOR DISEASE DIAGNOSIS AND DRUG METABOLITE SCREENING



(57) **Abstract:** A method of measuring and calculating (preferably by a computer with output to a user) tGSH (total glutathione very particularly defined) with sample preparation and assay methods that have been confirmed to provide accurate and reliable tGSH and related diagnostic assays in blood or tissue from a patient.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/043779**A. CLASSIFICATION OF SUBJECT MATTER****G01N 33/15(2006.01)i, G01N 33/487(2006.01)i, G01N 33/68(2006.01)i**

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)

G01N 33/15; C12Q 1/26; C12Q 1/06

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: reduced glutathione, GSH, oxidized glutathione, GSSG, ratio, and mass spectrometer

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	OWEN, JOSHUA B. et al., 'Measurement of oxidized/reduced glutathione ratio', Protein Misfolding and Cellular Stress in Disease and Aging: Concepts and Protocols, Methods in Molecular Biology, Springer Science+Business Media, LLC, 2010, Vol. 648, pp. 269-277 See abstract; page 270, para. 3 - page 271, para. 1; page 272, paras. 1-3; page 274, para. 1 - page 276, para. 1.	1-11
A	IWASAKI, YUSUKE et al., 'Chromatographic and mass spectrometric analysis of glutathione in biological samples', Journal of Chromatography B, 15 October 2009, Vol. 877, No. 28, pp. 3309-3317 See abstract; page 3311, column 1, paras. 1-2; page 3314, column 2, para. 5.	1-11
A	US 6235495 B1 (FU, MIN-XIN et al.) 22 May 2001 See abstract; claims 1, 8; column 3, line 54 - column 4, line 60.	1-11
A	US 2005-0287623 A1 (YAN, ZHENGYIN et al.) 29 December 2005 See abstract; claims 1-2, 8-9, 14; paras. 62, 69.	1-11
A	US 2009-0029409 A1 (SOGA, TOMOYOSHI et al.) 29 January 2009 See abstract; claims 1, 4; paras. 22-23, 26.	1-11

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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