Study of the copper binding properties of metformin is important for revealing its mechanism of action as a first-line type-2 diabetes drug. A quantitative investigation of interactions between metformin and l-cysteine-copper complexes was performed. The results suggest that metformin could interact with biological copper, which plays a key role in mitochondrial function.

General information
State: Published
Organisations: Department of Micro- and Nanotechnology, Nanoprobes, Bioanalytics, DTU Danchip, Magnetic Systems, Center for Intelligent Drug Delivery and Sensing Using Microcontainers and Nanomechanics, University of Dundee
Contributors: Quan, X., Uddin, R., Heiskanen, A., Parmvi, M., Nilson, K., Donolato, M., Hansen, M. F., Rena, G., Boisen, A.
Pages: 17313-17316
Publication date: 2015
Peer-reviewed: Yes

Publication information
Journal: Chemical Communications
Volume: 51
Issue number: 97
ISSN (Print): 1359-7345
Ratings:
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Scopus rating (2017): CiteScore 6.03 SJR 2.555 SNIP 1.127
Web of Science (2017): Impact factor 6.29
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 6.06 SJR 2.538 SNIP 1.16
Web of Science (2016): Impact factor 6.319
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): CiteScore 6.7 SJR 2.601 SNIP 1.295
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 2
Scopus rating (2014): CiteScore 6.83 SJR 2.692 SNIP 1.436
Web of Science (2014): Impact factor 6.834
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): CiteScore 6.73 SJR 2.752 SNIP 1.372
Web of Science (2013): Impact factor 6.718
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): CiteScore 6.21 SJR 3.118 SNIP 1.35
Web of Science (2012): Impact factor 6.378
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): CiteScore 5.96 SJR 2.889 SNIP 1.323
Web of Science (2011): Impact factor 6.169
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 2
Scopus rating (2010): SJR 2.781 SNIP 1.255
Web of Science (2010): Impact factor 5.787
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 2
Scopus rating (2009): SJR 2.669 SNIP 1.31
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 2.909 SNIP 1.286
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 2.957 SNIP 1.278
Web of Science (2007): Indexed yes
Scopus rating (2006): SJR 2.487 SNIP 1.264
Web of Science (2006): Indexed yes
Scopus rating (2005): SJR 2.265 SNIP 1.225
Web of Science (2005): Indexed yes
Scopus rating (2004): SJR 2.071 SNIP 1.251
Scopus rating (2003): SJR 1.828 SNIP 1.2
Web of Science (2003): Indexed yes
Scopus rating (2002): SJR 2.04 SNIP 1.29
Web of Science (2002): Indexed yes
Scopus rating (2001): SJR 2.036 SNIP 1.215
Web of Science (2001): Indexed yes
Scopus rating (2000): SJR 1.843 SNIP 1.193
Web of Science (2000): Indexed yes
Scopus rating (1999): SJR 1.777 SNIP 1.162
Original language: English
Electronic versions:
c5cc04321b_1.pdf
DOIs:
10.1039/c5cc04321b
Source: FindIt
Source-ID: 2281476659
Research output: Research - peer-review ; Journal article – Annual report year: 2015