

Accepted Manuscript

Novel metal chelating molecules with anticancer activity. Striking effect of the imidazole substitution of the histidine-pyridine-histidine system

Taha F.S. Ali, Kana Iwamaru, Halil Ibrahim Ciftci, Ryoko Koga, Masahiro Matsumoto, Yasunori Oba, Hiromasa Kurosaki, Mikako Fujita, Yoshinari Okamoto, Kazuo Umezawa, Mitsuyoshi Nakao, Takuichiro Hide, Keishi Makino, Jun-ichi Kuratsu, Mohamed Abdel-Aziz, Gamal El-Din A.A. Abu-Rahma, Eman A.M. Beshr, Masami Otsuka

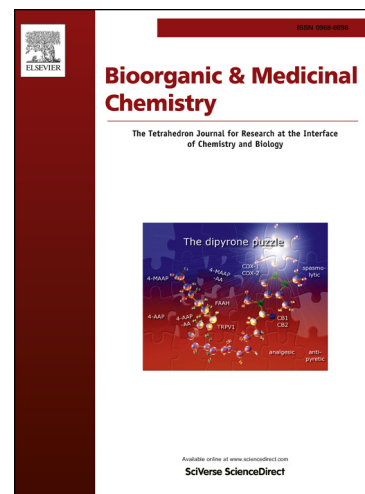
PII: S0968-0896(15)00628-8
DOI: <http://dx.doi.org/10.1016/j.bmc.2015.07.044>
Reference: BMC 12473

To appear in: *Bioorganic & Medicinal Chemistry*

Received Date: 30 May 2015
Revised Date: 21 July 2015
Accepted Date: 24 July 2015

Please cite this article as: Ali, T.F.S., Iwamaru, K., Ciftci, H.I., Koga, R., Matsumoto, M., Oba, Y., Kurosaki, H., Fujita, M., Okamoto, Y., Umezawa, K., Nakao, M., Hide, T., Makino, K., Kuratsu, J-i., Abdel-Aziz, M., Abu-Rahma, G.E-D., Beshr, E.A.M., Otsuka, M., Novel metal chelating molecules with anticancer activity. Striking effect of the imidazole substitution of the histidine-pyridine-histidine system, *Bioorganic & Medicinal Chemistry* (2015), doi: <http://dx.doi.org/10.1016/j.bmc.2015.07.044>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Novel metal chelating molecules with anticancer activity.
Striking effect of the imidazole substitution of the histidine-pyridine-histidine system.

Taha F. S. Ali^a, Kana Iwamaru^a, Halil Ibrahim Ciftci^a, Ryoko Koga^a, Masahiro Matsumoto,^a Yasunori Oba,^a Hiromasa Kurosaki^b, Mikako Fujita^c, Yoshinari Okamoto^a, Kazuo Umezawa^c, Mitsuyoshi Nakao^d, Takuichiro Hide^f, Keishi Makino^f, Jun-ichi Kuratsu^f, Mohamed Abdel-Aziz^g, Gamal El-Din A. A. Abuo-Rahma^g, Eman A. M. Beshr^{g,h}, Masami Otsuka^{a*}

^a Department of Bioorganic Medicinal Chemistry, Faculty of Life Sciences, Kumamoto University, 5-1 Oe-honmachi, Chuo-ku, Kumamoto 862-0973, Japan

^b College of Pharmacy, Kinjo Gakuin University, 2-1723 Omori, Moriyama-ku, Nagoya, Aichi 463-8521, Japan

^c Research Institute for Drug Discovery, School of Pharmacy, Kumamoto University, 5-1 Oe-honmachi, Chuo-ku, Kumamoto 862-0973, Japan

^d Department of Molecular Target Medicine Screening, School of Medicine, Aichi Medical University, Nagakute, Aichi 480-1195, Japan

^e Department of Medical Cell Biology, Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto 860-0811, Japan

^f Department of Neurosurgery, Faculty of Medicine, Kumamoto University, 1-1-1 Honjo Chuo-ku, Kumamoto 860-8556, Japan

^g Department of Medicinal Chemistry, Faculty of Pharmacy, Minia University, 61519 Minia, Egypt

^h Department of pharmaceutical chemistry, College of Pharmacy, Umm Al-Qura University, Makkah 21955, Saudi Arabia

* Corresponding author. E-mail address: motsuka@gpo.kumamoto-u.ac.jp

Keywords

Histidine-pyridine-histidine, AsPC-1, U87, U251, DNA cleavage

Download English Version:

<https://daneshyari.com/en/article/10583404>

Download Persian Version:

<https://daneshyari.com/article/10583404>

[Daneshyari.com](https://daneshyari.com)