## Accepted Manuscript

A General Approach to Access 5,6-dihydroindolo-naphthyridine ring system

Shuwen He, Peng Li, Xing Dai, Hong Liu, Zhong Lai, Dong Xiao, Casey C. McComas, Chunyan Du, Yuehui Liu, Jingjun Yin, Qun Dang, Nicolas Zorn, Xuanjia Peng, Ravi P. Nargund, Anandan Palani

PII: DOI: Reference:	S0040-4039(17)30197-1 http://dx.doi.org/10.1016/j.tetlet.2017.02.030 TETL 48641
To appear in:	Tetrahedron Letters
Received Date:	26 November 2016
Revised Date:	4 February 2017
Accepted Date:	9 February 2017



Please cite this article as: He, S., Li, P., Dai, X., Liu, H., Lai, Z., Xiao, D., McComas, C.C., Du, C., Liu, Y., Yin, J., Dang, Q., Zorn, N., Peng, X., Nargund, R.P., Palani, A., A General Approach to Access 5,6-dihydroindolonaphthyridine ring system, *Tetrahedron Letters* (2017), doi: http://dx.doi.org/10.1016/j.tetlet.2017.02.030

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.

## A General Approach to Access 5,6-dihydroindolo-naphthyridine ring system

Shuwen He<sup>a</sup>, Peng Li<sup>b</sup>, Xing Dai<sup>a</sup>, Hong Liu<sup>a</sup>, Zhong Lai<sup>a</sup>, Dong Xiao<sup>a</sup>, Casey C. McComas <sup>c</sup>, Chunyan Du<sup>b</sup>, Yuehui Liu<sup>b</sup>, Jingjun Yin<sup>d</sup>, Qun Dang<sup>a</sup>, Nicolas Zorn<sup>a</sup>, Xuanjia Peng<sup>b</sup>, Ravi P. Nargund<sup>a</sup>, Anandan Palani<sup>a</sup>

<sup>a</sup> Discovery Chemistry, Merck Research Laboratories, 2000 Galloping Hill Road, Kenilworth, NJ 07033, USA

<sup>b</sup> WuXi Apptec Co., Ltd, 288 Fute Zhong Road, Waigaoqiao Free Trade Zone, Shanghai 200131, P. R. China

<sup>c</sup> Discovery Chemistry, Merck Research Laboratories, 770 Sumneytown Pike, West Point, PA 19486, USA

<sup>d</sup> Discovery Process Chemistry, Merck Research Laboratories, 2000 Galloping Hill Road, Kenilworth, NJ 07033, USA



**Abstract**— We report a general approach for the synthesis of 5,6-dihydroindolo-naphthyridine ring system via an intramolecuar cyclization of the indole NH to an alkene moiety as the key step.

**Key words**— intramolecular cyclization, 5,6-dihydroindolo-naphthyridine ring system, indole, alkene. ©2016 Elsevier Science Ltd. All rights reserved.

## Highlights

- A novel intramolecular cyclization gives access to the title ring system.
- Various precursors containing a six-membered azine are tolerated.
- This method affords 2c with a sterically congested C next to indole N.



Download English Version:

## https://daneshyari.com/en/article/5259794

Download Persian Version:

https://daneshyari.com/article/5259794

Daneshyari.com