Accepted Manuscript

Recent applications of Stille reaction in total synthesis of natural products: An update

Majid M. Heravi, Leyla Mohammadkhani

PII: S0022-328X(18)30399-1

DOI: 10.1016/j.jorganchem.2018.05.018

Reference: JOM 20452

To appear in: Journal of Organometallic Chemistry

Received Date: 21 March 2018

Revised Date: 15 May 2018

Accepted Date: 23 May 2018

Please cite this article as: M.M. Heravi, L. Mohammadkhani, Recent applications of Stille reaction in total synthesis of natural products: An update, *Journal of Organometallic Chemistry* (2018), doi: 10.1016/j.jorganchem.2018.05.018.

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.



Recent Applications of Stille Reaction in Total Synthesis of Natural Products: an update

Majid M Heravi* and Leyla Mohammadkhani

Department of Chemistry, Alzahra University, Vanak, Tehran, Iran E-mail-address:mmh1331@yahoo.com, <u>mmheravi@alzahra.ac.ir</u>

Contents

Abstract

- 1. Introduction
- 2. Utilities of Stille reaction in the total synthesis of
- 2.1. Macrolides
- 2.2. Alkaloids
- 2.3. Cyclic Ethers
- 2.4. Terpenes
- 2.5. Lactones
- 2.6. Miscellaneous

Conclusion

Acknowledgments

References

Abstract

Stille reaction is one of the most common, efficient and selective Pd-catalyzed cross-coupling reactions for the construction of C-C bonds in the art of organic synthesis. It was initially achieved and reported in 1978 by J. K. Stille and D. Milstein. This reaction is based on organotin compounds in the presence of catalytic amount of Pd complexes which can be performed in mild reaction conditions. Nowadays, this strategy is considered as a powerful tool in the total synthesis of a wide variety of natural products and non-natural biologically active compounds as well as synthetic key intermediates in the curtail C-C bonds construction steps. In 2013 we reported the applications of Stille reaction in the total synthesis of natural products, published in Tetrahedron. Due to huge numbers of references regarding the applications of this name reaction

Download English Version:

https://daneshyari.com/en/article/7755745

Download Persian Version:

https://daneshyari.com/article/7755745

Daneshyari.com