Accepted Manuscript

Observations concerning the synthesis of tryptamine homologues and branched tryptamine derivatives via the borrowing hydrogen process: synthesis of psilocin, bufotenin, and serotonin

Silvia Bartolucci, Michele Mari, Giovanni Di Gregorio, Giovanni Piersanti

PII: S0040-4020(16)30139-9

DOI: 10.1016/j.tet.2016.03.007

Reference: TET 27547

To appear in: *Tetrahedron*

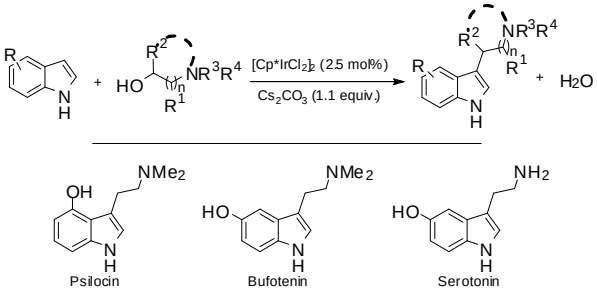
Received Date: 1 January 2016

Revised Date: 13 February 2016

Accepted Date: 1 March 2016

Please cite this article as: Bartolucci S, Mari M, Di Gregorio G, Piersanti G, Observations concerning the synthesis of tryptamine homologues and branched tryptamine derivatives via the borrowing hydrogen process: synthesis of psilocin, bufotenin, and serotonin, *Tetrahedron* (2016), doi: 10.1016/j.tet.2016.03.007.

Hydrogen Borrowing



Give and take: $[Cp^*IrCl_2]_2$ effectively catalyzed the alkylation of indole with amino alcohols to give tryptamine homologues and branched (homo)-tryptamine derivatives via the borrowing hydrogen process. Applications to the syntheses of biologically active compounds such as Psilocin, Bufotenin, Serotonin, are also described.