
Molecular libraries of natural product-like and structurally diverse compounds are attractive in early drug discovery campaigns. In here, we present synthetic methodology for library production of hexahydropyrrolo[2,1-a]isoquinoline (HPIQ) compounds. Two advanced HPIQ intermediates, both incorporating two handles for diversification, were synthesized through an oxidative cleavage/Pictet–Spengler reaction sequence in high overall yields. A subsequent metal-catalyzed cross coupling/amidation protocol was developed and its utility in library synthesis was validated by construction of a 20-membered natural product-like molecular library in good overall yields.

General information
State: Published
Organisations: Department of Chemistry, Organic Chemistry
Contributors: Petersen, R., Cohrt, A. E., Petersen, M. Å., Wu, P., Clausen, M. H., Nielsen, T. E.
Number of pages: 4
Pages: 2646-2649
Publication date: 2015
Peer-reviewed: Yes

Publication information
Journal: Bioorganic & Medicinal Chemistry
Volume: 23
Issue number: 11
ISSN (Print): 0968-0896
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Scopus rating (2017): CiteScore 2.9 SJR 0.871 SNIP 0.956
Web of Science (2017): Impact factor 2.881
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.96 SJR 0.984 SNIP 0.975
Web of Science (2016): Impact factor 2.93
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 3 SJR 1.03 SNIP 1.052
Web of Science (2015): Impact factor 2.923
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 2.87 SJR 1.01 SNIP 1.095
Web of Science (2014): Impact factor 2.793
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 3.08 SJR 1.064 SNIP 1.198
Web of Science (2013): Impact factor 2.951
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 3.12 SJR 1.204 SNIP 1.307
Web of Science (2012): Impact factor 2.903
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 3.09 SJR 1.137 SNIP 1.257
Web of Science (2011): Impact factor 2.921