Electronic Supplementary Information

One-pot Three-component Coupling Access to 1,2-Dihydropyrrolo[1,2-a]pyrazine-1-phosphonates: Multi-Functionalization of Pyrazine Unit

Jeong Hwa Lee,a,‡ Seok Hyun Yoon,b,‡ Seonghyeon Nam,a and Ikyon Kima,*

a College of Pharmacy and Yonsei Institute of Pharmaceutical Sciences, Yonsei University
85 Songdogwahak-ro, Yeonsu-gu, Incheon, 21983, Republic of Korea

b Graduate Program of Industrial Pharmaceutical Sciences, Yonsei University
85 Songdogwahak-ro, Yeonsu-gu, Incheon, 21983, Republic of Korea

‡ These authors contributed equally.

* Corresponding author. Tel.: +82 32 749 4515; fax: +82 32 749 4105; e-mail: ikyonkim@yonsei.ac.kr

Table of Contents

Copies of $^1$H and $^{13}$C NMR spectra of 9 S2-45
Copies of $^1$H and $^{13}$C NMR spectra of 10 S46
Copies of $^1$H and $^{13}$C NMR spectra of 12 S47
Copies of $^1$H and $^{13}$C NMR spectra of 14 S48-49
Copies of $^1$H and $^{13}$C NMR spectra of 15 S50
Copies of $^1$H and $^{13}$C NMR spectra of 16 S51
S24