## Supporting Information

## A Regioselective Pd-catalyzed $\boldsymbol{\alpha}$-Alkylation of Furans Using Alkyl Iodides

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## I. General experimental procedures

Compound $2 \mathbf{y}$ was reported compound and synthesized according to the literature procedure (Angew. Chem. Int. Ed. 2014, 53, 13573-13577).

## II. NMR spectra of Compounds

${ }^{1} \mathrm{H}$ NMR of compound 3a

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 a}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 b}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 b}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 c}$

${ }^{13} \mathrm{C}$ NMR of compound 3 c

${ }^{1} \mathrm{H}$ NMR of compound 3d


${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 d}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 e}$

${ }^{13} \mathrm{C}$ NMR of compound 3 e

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 f}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 f}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 g}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 g}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 h}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 h}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 i}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 i}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 j}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 j}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 k}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 k}$

${ }^{1} \mathrm{H}$ NMR of compound 31

${ }^{13} \mathrm{C}$ NMR of compound 31

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 m}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 m}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 n}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 n}$

${ }^{1} \mathrm{H}$ NMR of compound 30

${ }^{13} \mathrm{C}$ NMR of compound 30

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 p}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 p}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 q}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 q}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 r}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 r}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 s}$

${ }^{13} \mathrm{C}$ NMR of compound 3 s

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 t}$

${ }^{13} \mathrm{C}$ NMR of compound 3 t

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 u}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 u}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 v}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 v}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 w}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 w}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 x}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 x}$

${ }^{1} \mathrm{H}$ NMR of compound $\mathbf{3 y}$

${ }^{13} \mathrm{C}$ NMR of compound $\mathbf{3 y}$


