SUPPORTING INFORMATION

Highly Active Catalyst for the Heterogeneous Suzuki-Miyaura Reaction: Assembled Complex of Palladium and Non-Cross-linked Amphiphilic Polymer

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Experimental Section

General. All the products were isolated, and hence all the yields presented meant isolated yields. Melting points were uncorrected. ^1H and ^{13}C NMR spectra were recorded with 400MHz and 600 MHz (^1H NMR) pulse Fourier transform NMR spectrometers in CDCl_3 solution with tetramethylsilane as an internal standard. Gel-phase ^{31}P NMR spectra were recorded with a 600 MHz (^1H NMR) pulse Fourier transform NMR spectrometers in CDCl_3 suspension with 85% H_3PO_4 aqueous solution as an external standard. All the reactions were performed under an argon atmosphere unless cited.

Materials. THF was distilled from benzophenone and Na prior to use. Purchased aryl (and alkenyl) halides **6**, **9** and **12**, purchased aryl (and alkenyl) boronic acids **7** and **10**, *N*-isopropylacrylamide (**5**) (purchased from Aldrich), AIBN, *t*-BuOH, $(\text{NH}_4)_2\text{PdCl}_4$, Na_2CO_3 , KF, 9-BBN-H in THF, alkenylboronic acid **10** were used without purification. 1-Octene and styrene for preparing alkyl-9-BBNs were freshly distilled prior to use. Diphenylphosphinostyrene (**4**)¹ was prepared according to the established method. All the organic solvents for the Suzuki-Miyaura reactions (Table 4-6) and water were freshly distilled prior to use. PdAS will be available from Tokyo Chemical Industry Co., Ltd (URL: <http://www.tokyokasei.co.jp>). ¹ Bennett, M. A.; Nyholm, R. S.; Saxby, J. D. *J. Organomet. Chem.* **1967**, *10*, 301-306.

1. **Figure S-1. Recyclable System for the Heterogeneous Suzuki-Miyaura Reaction of 6a and 7a (left: in reaction; right: after reaction)**

2. Scheme S-1. Angiotensin II antagonists

8a

(isolated by crystallization without using an organic solvent)

Polymer 2

^1H NMR

PdAS

Gel phase-¹H NMR

14e

14e