Electronic Supplementary Information For:

The Palladium-Catalysed Copper-Free Sonogashira Coupling of Isoindoline Nitroxides: A Convenient Route to Robust Profluorescent Carbon-Carbon Frameworks

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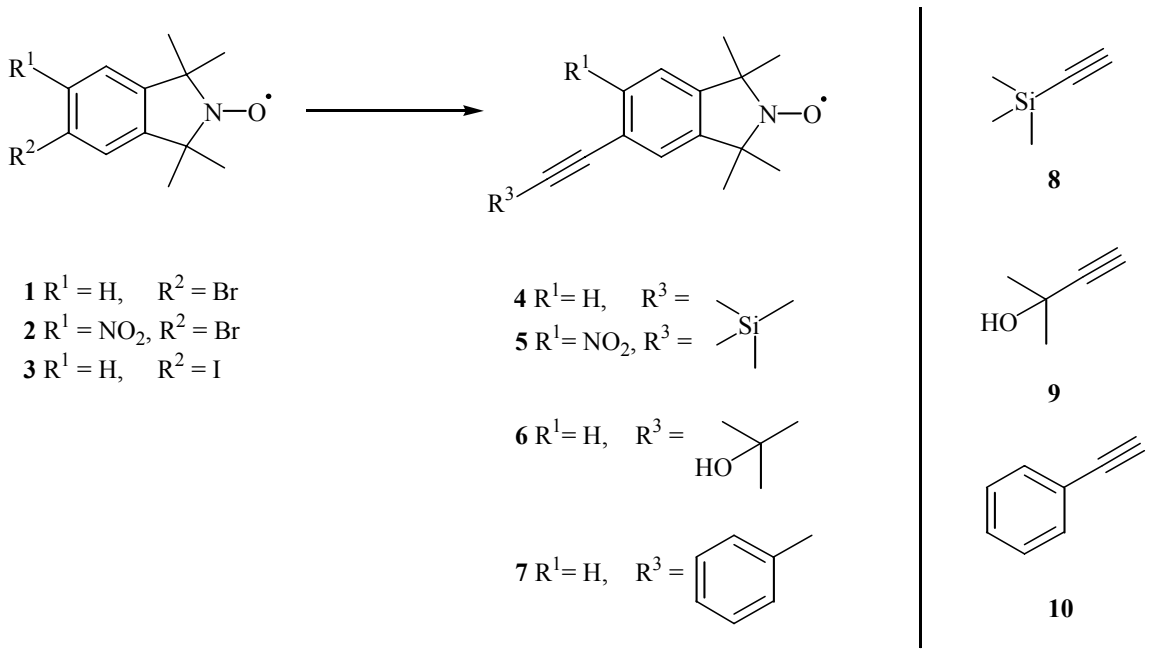

Scheme S1. Sonogashira coupling of isoindoline nitroxides

Table S1. Full details of experimental conditions attempted for Sonogashira couplings of halogenated isoindoline nitroxides and alkynes

Entry	Nitroxide	Alkyne	Catalyst system/Solvent	Conditions	Product	Isolated Yield (%)
1	**1**	**8** (1.2 equiv)	$Pd(PPh_3)_2Cl_2$ (2 mol%), CuI 0.5 mol%), Et_3N	rt, Ar, 72 h	**4**	0
2	**1**	**10** (2 equiv)	$Pd(PPh_3)_2Cl_2$ (2 mol%), CuI 10 mol%), Et_3N	rt, Ar, 96 h	**7**	0
3	**1**	**8** (1.2 equiv)	$Pd(PPh_3)_2Cl_2$ (2 mol%), CuI 0.5 mol%), Et_3N	90 °C, Ar, 72 h	**4**	0
4	**1**	**10** (2 equiv)	$Pd(PPh_3)_2Cl_2$ (2 mol%), CuI 10 mol%), Et_3N	90 °C, Ar, 96 h	**7**	0
5	**2**	**8** (1.2 equiv)	$Pd(PPh_3)_2Cl_2$ (2 mol%), CuI 0.5 mol%), Et_3N	rt, Ar, 72 h	**5**	0
6	**2**	**8** (1.2 equiv)	$Pd(PPh_3)_2Cl_2$ (2 mol%), CuI 0.5 mol%), Et_3N	90 °C, Ar, 72 h	**5**	0
7	**1**	**8** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	50 °C, air, 72 h	**4**	<5
8	**2**	**8** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	50 °C, air, 72 h	**5**	<5
9	**1**	**8** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	80 °C, air, 72 h	**4**	<5
10	**2**	**8** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	80 °C, air, 72 h	**5**	<5
11	**1**	**8** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	80 °C, Ar, 72 h	**4**	5
12	**2**	**8** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	80 °C, Ar, 72 h	**5**	9
13	**1**	**9** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	80 °C, Ar, 72 h	**6**	<5

14	**1**	**10** (2 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	80 °C, Ar, 72 h	**7**	<5
15	**1**	**8** (5 equiv)	$Pd(OAc)_2$ (10 mol%), DABCO (3 equiv), MeCN	80 °C, Ar, 72 h	**4**	<5[a]
16	**1**	**8** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), PPh_3 (4 mol%), K_2CO_3 (2 equiv), MeCN	80 °C, Ar, 72 h	**4**	0[a]
17	**1**	**8** (20 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	80 °C, Ar, 72 h	**4**	8[a]
18	**1**	**8** (20 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	100 °C, Ar, 72 h	**4**	<5[a]
19	**1**	**8** (20 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), DMF	100 °C, Ar, 72 h	**4**	0[a]
20	**1**	**8** (50 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	100 °C, Ar, 72 h	**4**	<5[a]
21	**1**	**8** (50 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), DMF	100 °C, Ar, 72 h	**4**	0[a]
22	**1**	**8** (20 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), DMF	130 °C, Ar, 72 h	**4**	0[a]
23	**1**	**8** (50 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), DMF	130 °C, Ar, 72 h	**4**	0[a]
24	**3**	**8** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	80 °C, Ar, 24 h	**4**	92
25	**3**	**9** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	80 °C, Ar, 24 h	**6**	78
26	**3**	**10** (5 equiv)	$Pd(OAc)_2$ (2.5 mol%), DABCO (3 equiv), MeCN	80 °C, Ar, 24 h	**7**	96

[a] Yield determined by HPLC, product not isolated