***N*-H Carbazole synthesis from 2-chloroanilines *via* consecutive amination and C-H activation**

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Supporting Information

S3	General experimental conditions
S4 - S5	¹ H & ¹³ C NMR spectra of 4a
S6 – S7	¹ H & ¹³ C NMR spectra of 6
S8 – S9	¹ H & ¹³ C NMR spectra of 3b
S10 – S11	¹ H & ¹³ C NMR spectra of 4b
S12 – S13	¹ H & ¹³ C NMR spectra of 4c
S14 - S15	¹ H & ¹³ C NMR spectra of 4d
S16 – S17	¹ H & ¹³ C NMR spectra of 4e
S18 – S19	¹ H & ¹³ C NMR spectra of 4f
S20 – S21	¹ H & ¹³ C NMR spectra of 4g and 8
S22 – S23	¹ H & ¹³ C NMR spectra of 4h
S24 – S25	¹ H & ¹³ C NMR spectra of 4i
S26 – S27	¹ H & ¹³ C NMR spectra of 4j

S28 – S29	^1H & ^{13}C NMR spectra of 4k
S30 – S31	^1H & ^{13}C NMR spectra of 4l
S32 – S33	^1H & ^{13}C NMR spectra of 4m
S34 – S35	^1H & ^{13}C NMR spectra of 3c
S36 – S37	^1H & ^{13}C NMR spectra of 3d
S38 – S39	^1H & ^{13}C NMR spectra of 3e
S40 – S41	^1H & ^{13}C NMR spectra of 3f
S42 – S43	^1H & ^{13}C NMR spectra of 4n
S44 – S45	^1H & ^{13}C NMR spectra of 4o
S46 – S47	^1H & ^{13}C NMR spectra of 4p
S48 – S49	^1H & ^{13}C NMR spectra of 4q
S50 – S51	^1H & ^{13}C NMR spectra of 9a
S52 – S53	^1H & ^{13}C NMR spectra of 9b
S54 – S55	^1H & ^{13}C NMR spectra of 9c
S56 – S57	^1H & ^{13}C NMR spectra of 9d
S58	References

General experimental conditions

All reactions and preparations were carried out under a dry nitrogen atmosphere, either in a glove box or using standard Schlenk line techniques. Solvents were dried using a Grubbs system.¹ 2-Chloro-*N*-(4-methoxyphenyl)aniline, *N*-benzyl-2-chloroaniline and the palladacyclic complex **5** were prepared as described previously.^{2,3} Microwave reactions were performed using a Biotage AB Initiator (300 W; software version 1.1) with autochanger (8 positions) using Biotage 5 mL sealed vials.

References

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- 3 Bedford, R. B.; Hazelwood, S. L.; Horton, P. H.; Hursthouse, M. B. *Dalton Trans.* **2003**, 4164.