Anionic Polymerization of Styrene and 1,3-Butadiene in the Presence of Phosphazene Superbases

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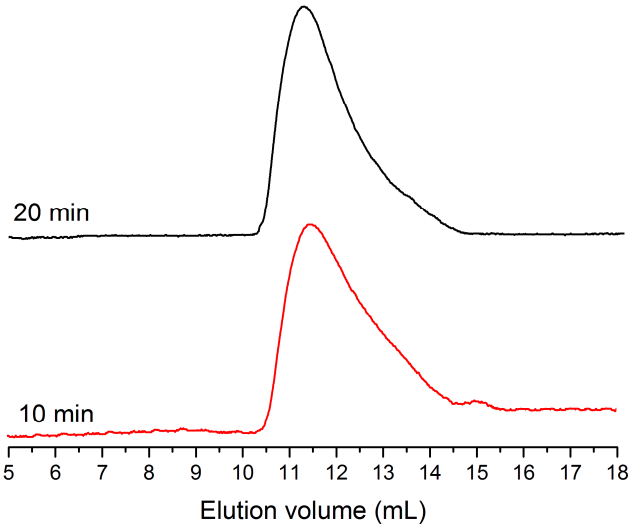

Figure S1. *SEC traces obtained from withdrawn aliquots at 10 min and 20 min {[t-BuP4]/[sec-BuLi]:1/1, styrene}.*

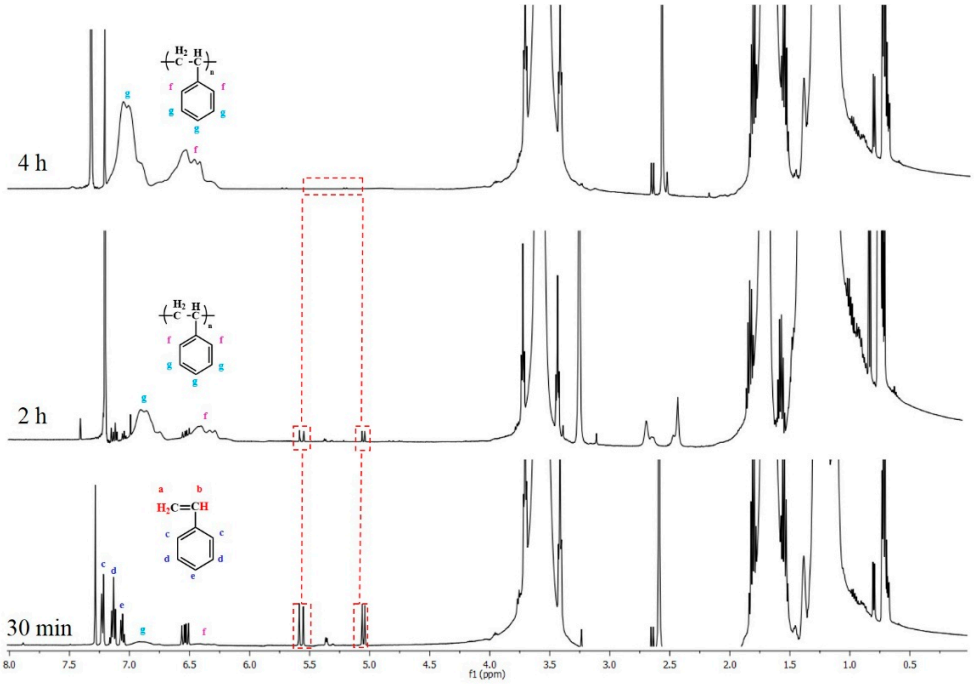

Figure S2. *^{1}H-NMR spectra after 30 min, 2h and 4h (100% conversion) {[t-BuP2]/[sec-BuLi]:0.5/1, styrene}.*

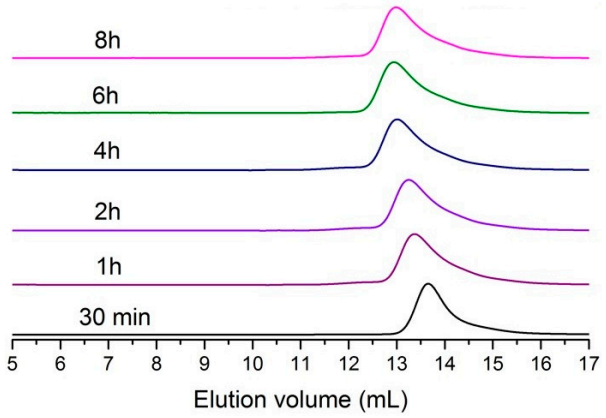

Figure S3. *SEC traces obtained from withdrawn aliquots during the polymerization of styrene with [t-BuP$_2$]/[sec-BuLi]:0.5/1.*

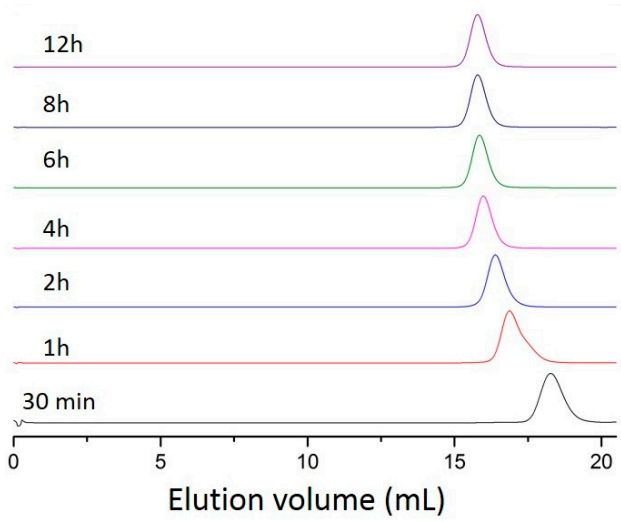

Figure S4. *SEC traces obtained from withdrawn aliquots during the polymerization of styrene with [t-BuP$_1$]/[sec-BuLi]:0.5/1.*

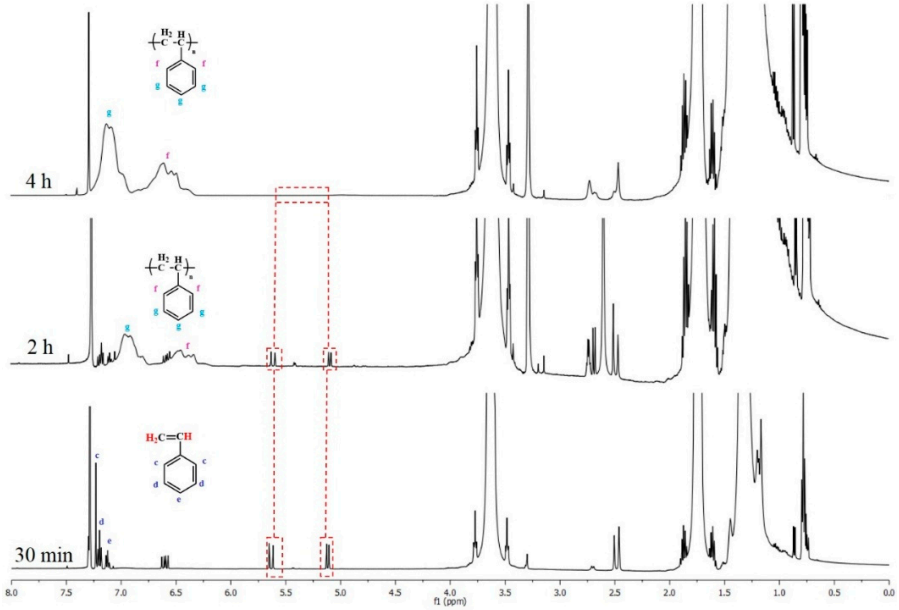

Figure S5. *^{1}H-NMR spectra after 30 min, 2h and 4h (100% conversion) {[t-BuP$_1$]/[sec-BuLi]:1/1, styrene}.*

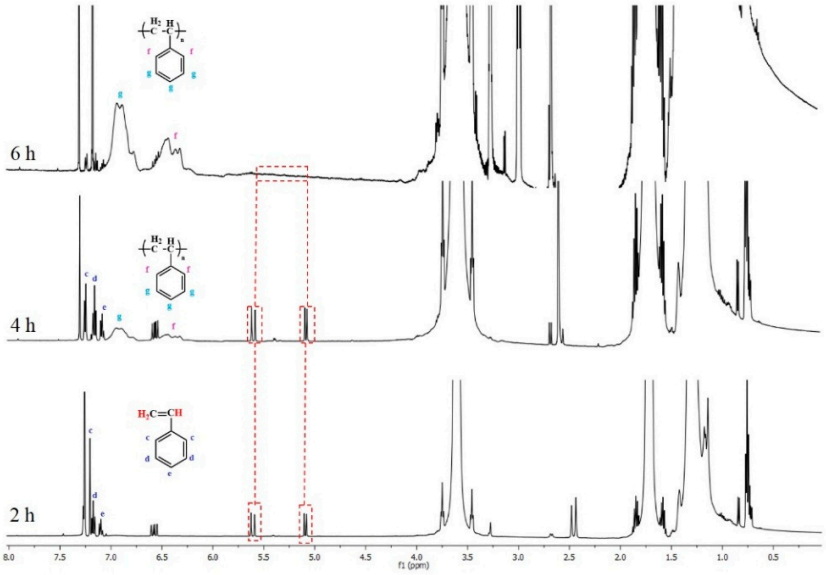

Figure S6. *^{1}H-NMR spectra after 2h, 4h and 6h (100% conversion) {[t-BuP$_1$]/[sec-BuLi]:0.5/1, styrene}.*

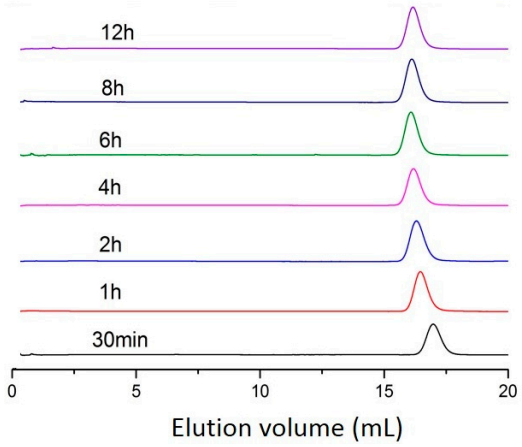

Figure S7. *SEC traces obtained from withdrawn aliquots during the polymerization of styrene in the absence of phosphazene base.*

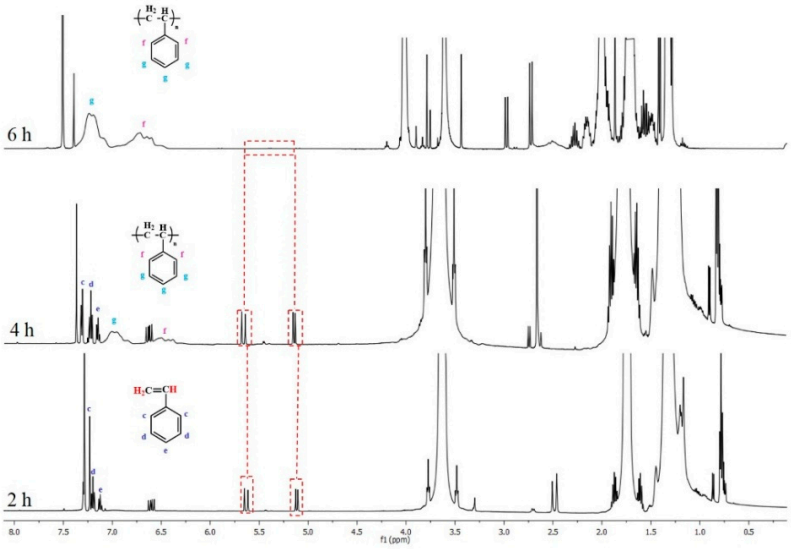

Figure S8. *^{1}H-NMR spectra after 2h, 4h and 6h (100% conversion) {styrene in the absence of phosphazene base}.*

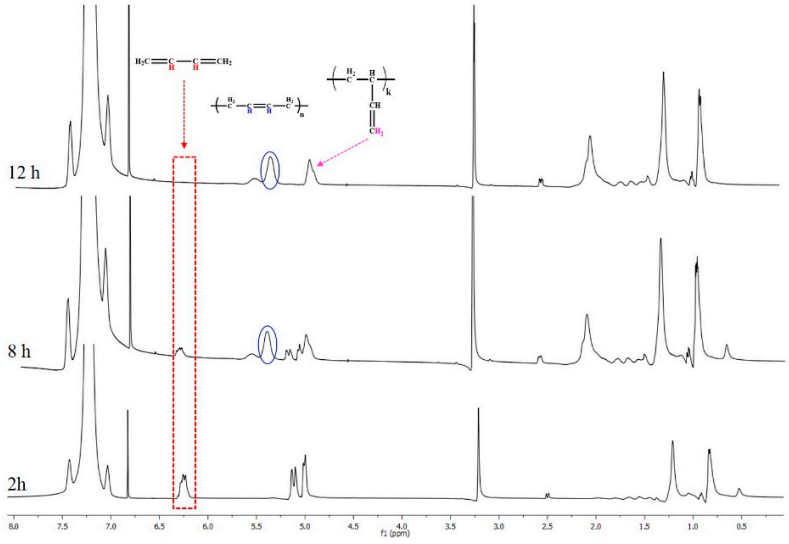

Figure S9. *[1]H-NMR spectra after 2h, 8h and 12h (100% conversion) {[t-BuP1]/[sec-BuLi]:1/1, 1,3-butadiene}.*

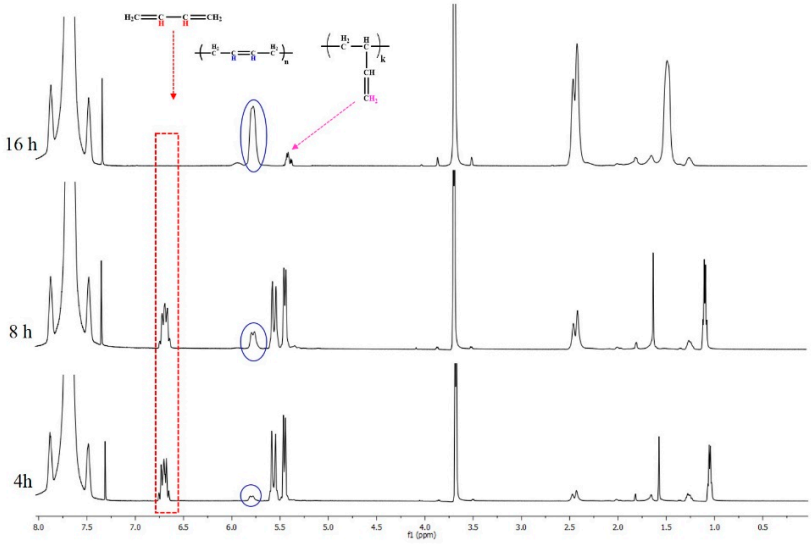

Figure S10. *[1]H-NMR spectra after 4h, 8h and 16h (100% conversion) {1,3-butadiene in the absence of phosphazene base}.*

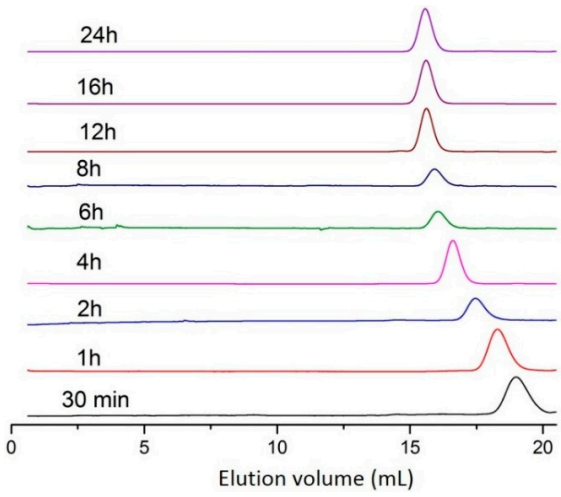

Figure S11. *SEC traces obtained from withdrawn aliquots during the polymerization of 1,3-butadiene in the absence of phosphazene base.*

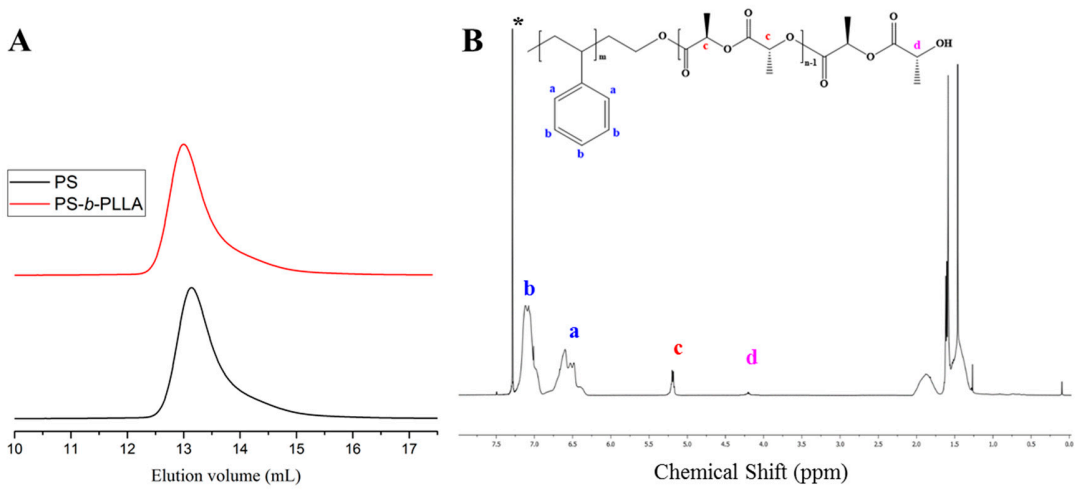

Figure S12. ***A****: SEC traces of PS (black line) synthesized with [t-BuP*$_2$*]/[sec-BuLi]:1/1 and the corresponding PS-b-PLLA (red line).* ***B****:* ^{1}*H-NMR spectrum of the final diblock copolymer in CDCl*$_3$*.*

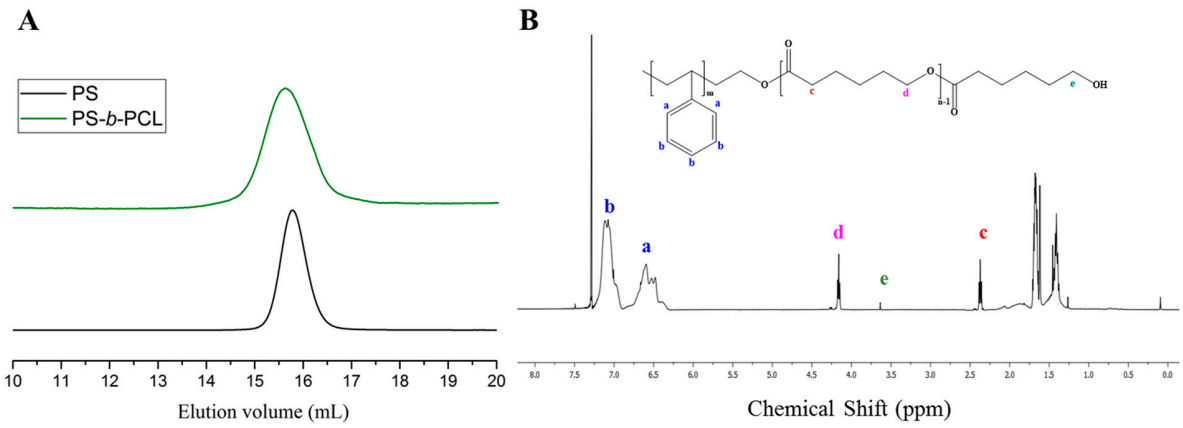

Figure S13. ***A****: SEC traces of PS (black line) synthesized by [t-BuP*$_1$*]/[sec-BuLi]:1/1 and of the corresponding PS-b-PCL (green line).* ***B****:* ^{1}*H-NMR spectrum of the final diblock copolymer in CDCl*$_3$*.*