Preparation of Phosphine-Functionalized Polystyrene Stars by Metal Catalyzed Living Radical Copolymerization and Their Application to Hydroformylation Catalysis.

Andrés F. Cardozo,[a,b,c] Eric Manoury[a,c], Carine Julcour[b,c], Jean-François Blanco[b,c], Henri Delmas[b,c], Florence Gayet,[a,c] Rinaldo Poli*[a,c,d]

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SUPPORTING INFORMATION

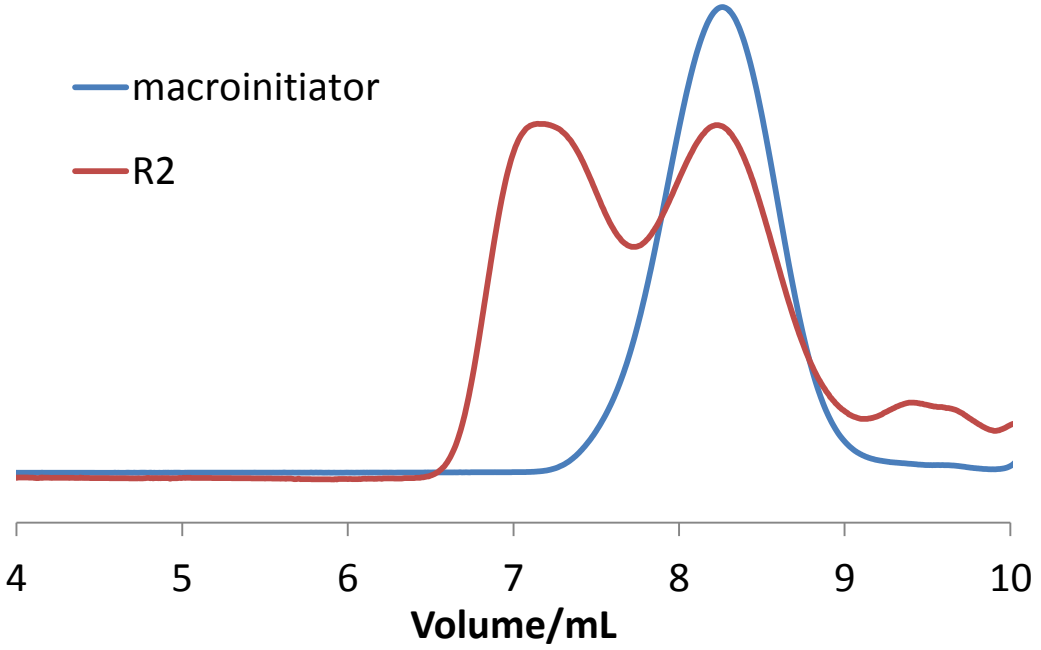

Figure S1. Size exclusion chromatogram (RI detector) for a P(S-s-SDPP) star polymer obtained by cross-linking of a $(CH_3)_2C(COOEt)$-$(S_{40}$-*co*-$SDPP_{12})$-Br macroinitiator with DVB under ATRP conditions.

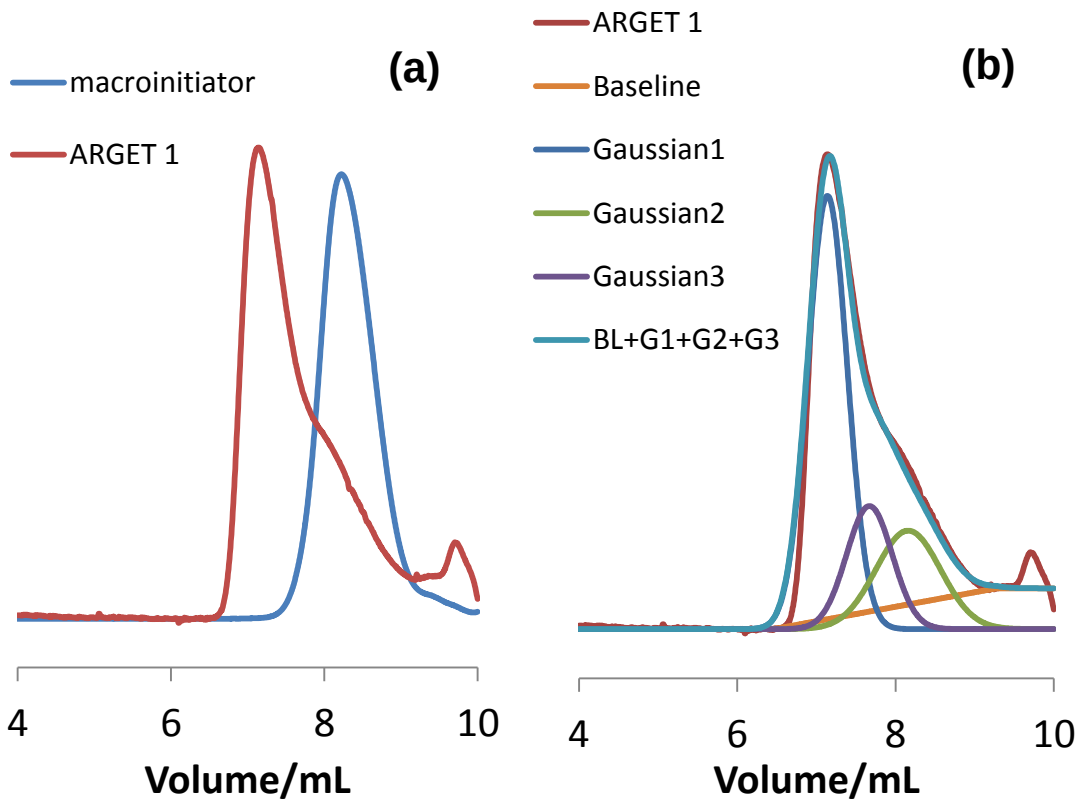

Figure S2. Size exclusion chromatogram (RI detector) for a P(S-s-SDPP) star polymer obtained by cross-linking of a $(CH_3)_2C(COOEt)$-$(S_{40}$-*co*-$SDPP_{12})$-Br macroinitiator with DVB under ARGET-ATRP conditions: comparison with the SEC of the macroinitiator (a); deconvolution as the sum of three Gaussians (b). Distribution G3 is centered on the elution volume of the macroinitiator.

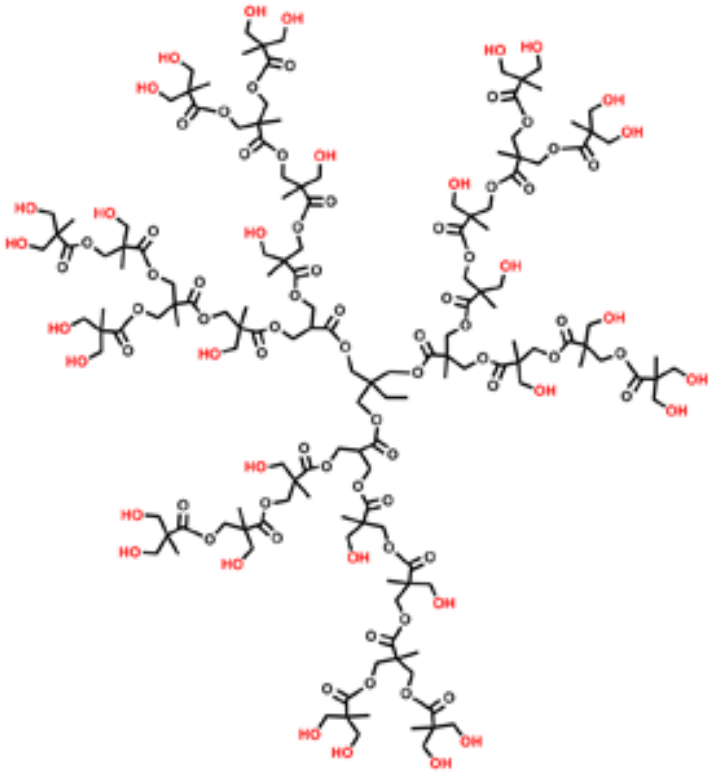

Figure S3. A representative molecule in Boltorn™ H30.

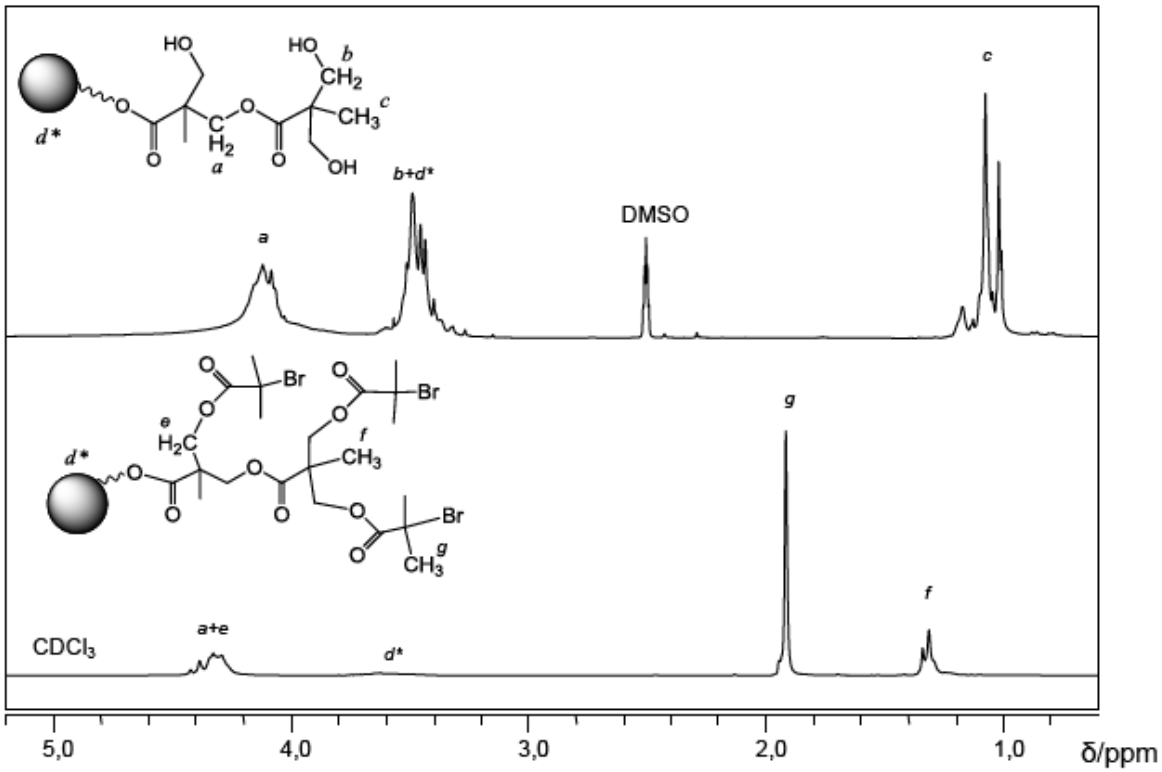

Figure S4. ^{1}H NMR analysis of Boltorn™ H30 and the product of acylation with $CH_3CHBrCOBr$.

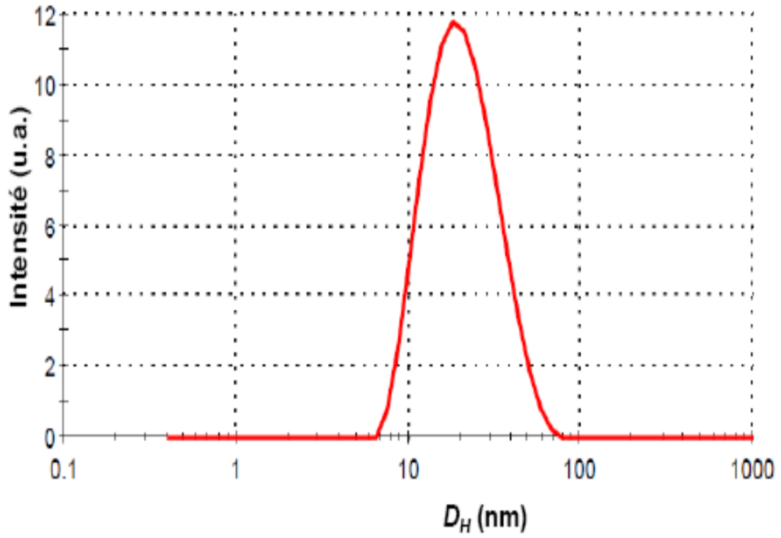

Figure S5. Size distribution of the star copolymer B-1 in toluene solution by DLS in intensity mode.

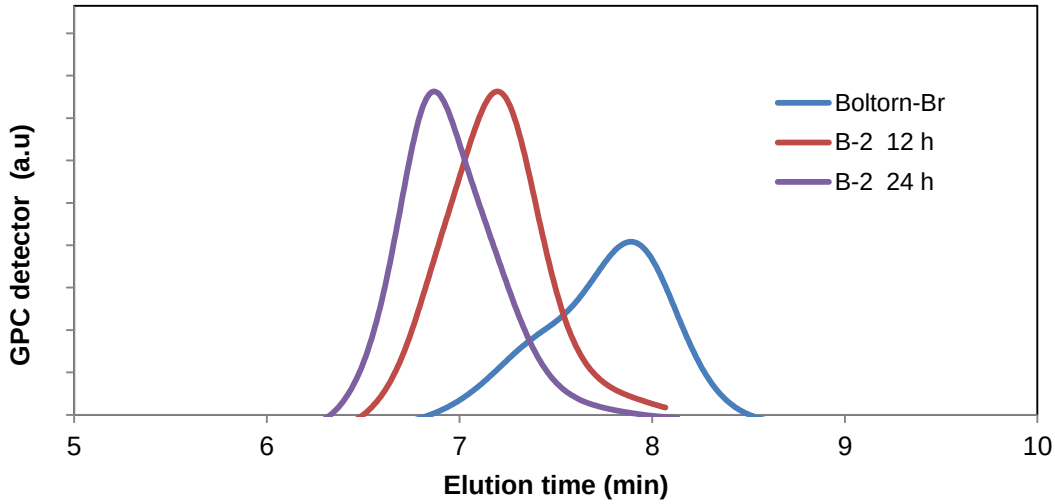

Figure S6. Evolution of the molecular weight distribution during the synthesis of polymer B-2 as measured by SEC.

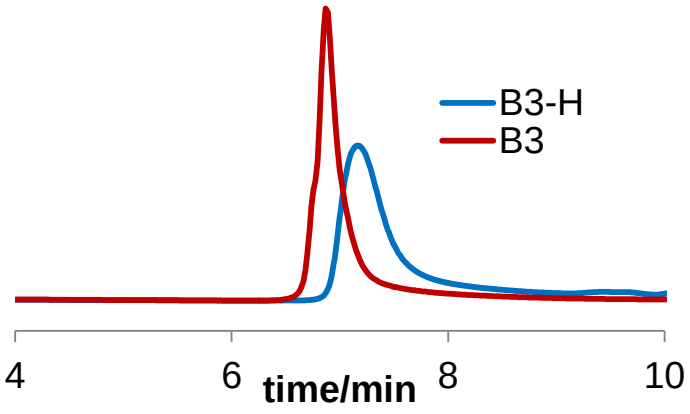

Figure S7. SEC of polymer B-3 before and after debromination (B3-H).