## Supporting information.

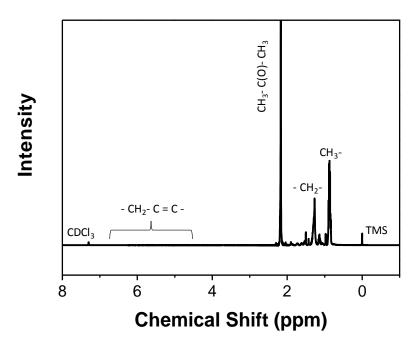


Figure S1. <sup>1</sup>H NMR spectrum of original PbSe NCs: At 5.5 ppm no sign for a double bound is found, at 2.3 ppm no sign for  $CH_2$ -COOH is found, at 2.0 ppm no sign for  $CH_2$ -C=C is found. The signal at 2.17 ppm is indicative for acetone impurities after cleaning. Tetramethylsilane (TMS) and chloroform-d (CDCl<sub>3</sub>) are present in the solvent used for NMR measurement.

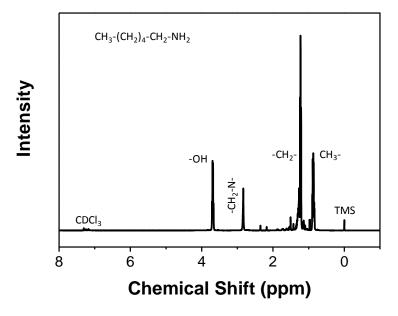


Figure S2.  $^{1}$ H NMR spectrum of hexylamine-treated PbSe NCs: The signal at 3.7 ppm is indicative for impurities after cleaning (ethanol); The signal at 2.8 ppm is slightly shifted with respect to the signal expected for -C $\mathbf{H}_{2}$ -N; The signal at 0.9 ppm corresponds to C $\mathbf{H}_{3}$  groups. The peaks between 1 ppm and 2 ppm are attributed to C $\mathbf{H}_{2}$  groups from amine and ethanol, as well as to the N $\mathbf{H}_{2}$  group.