Electronic Supplementary Information

Unprecedented surface stabilized InP quantum dots with bidentate ligands

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^{1}H and ^{13}C NMR of hexadecane-1,2-dithiol

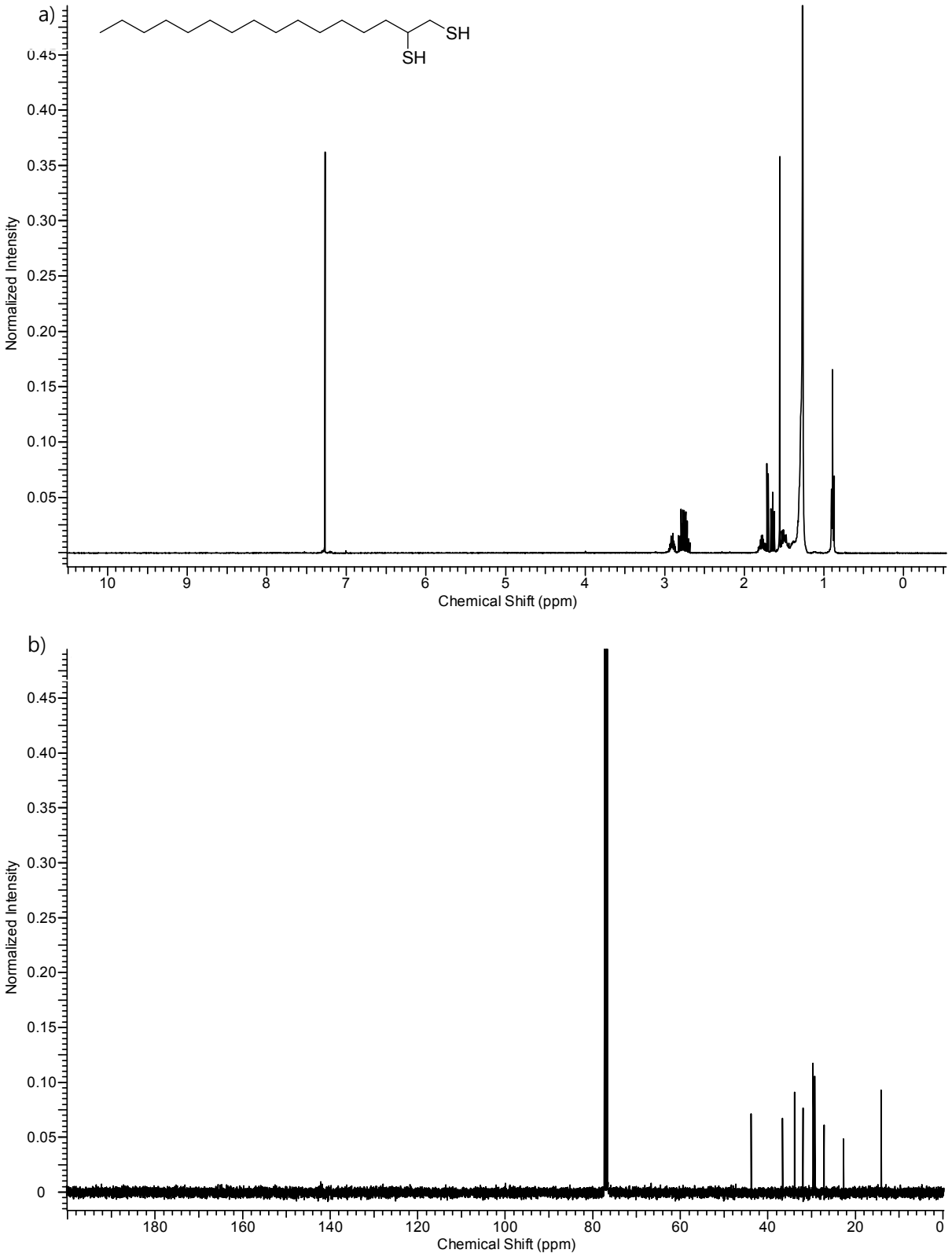

Figure S1. (a) ^{1}H NMR data of 1,2-hexadecanedithiol,
(b) ^{13}C NMR data of 1,2-hexadecanedithiol.

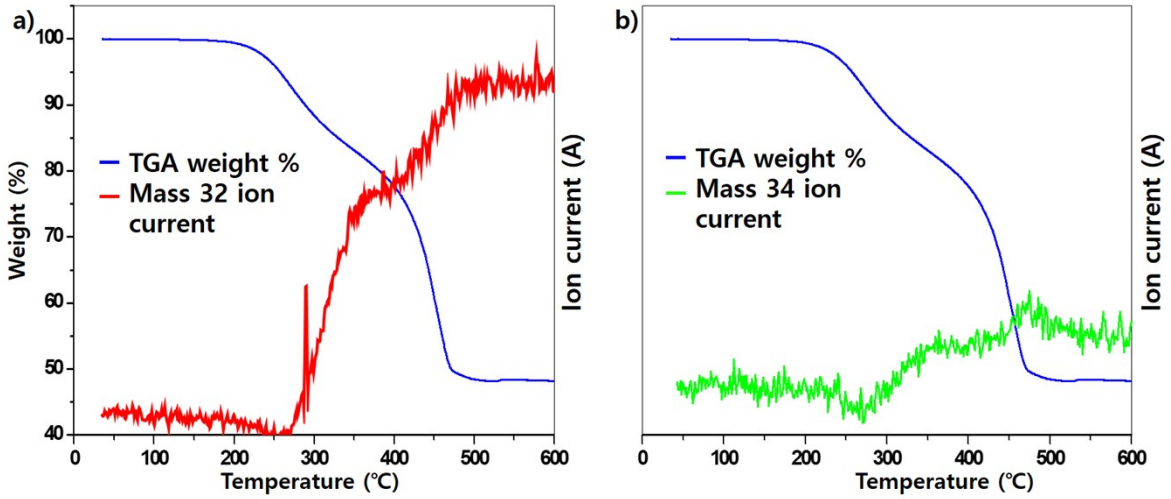

Figure S2. (a) TGA spectrum of dithiol exchanged QD and STA-Mass spectrum of 32 m/z ion , (b) TGA spectrum of dithiol exchanged QD and STA-Mass spectrum of 34 m/z ion.

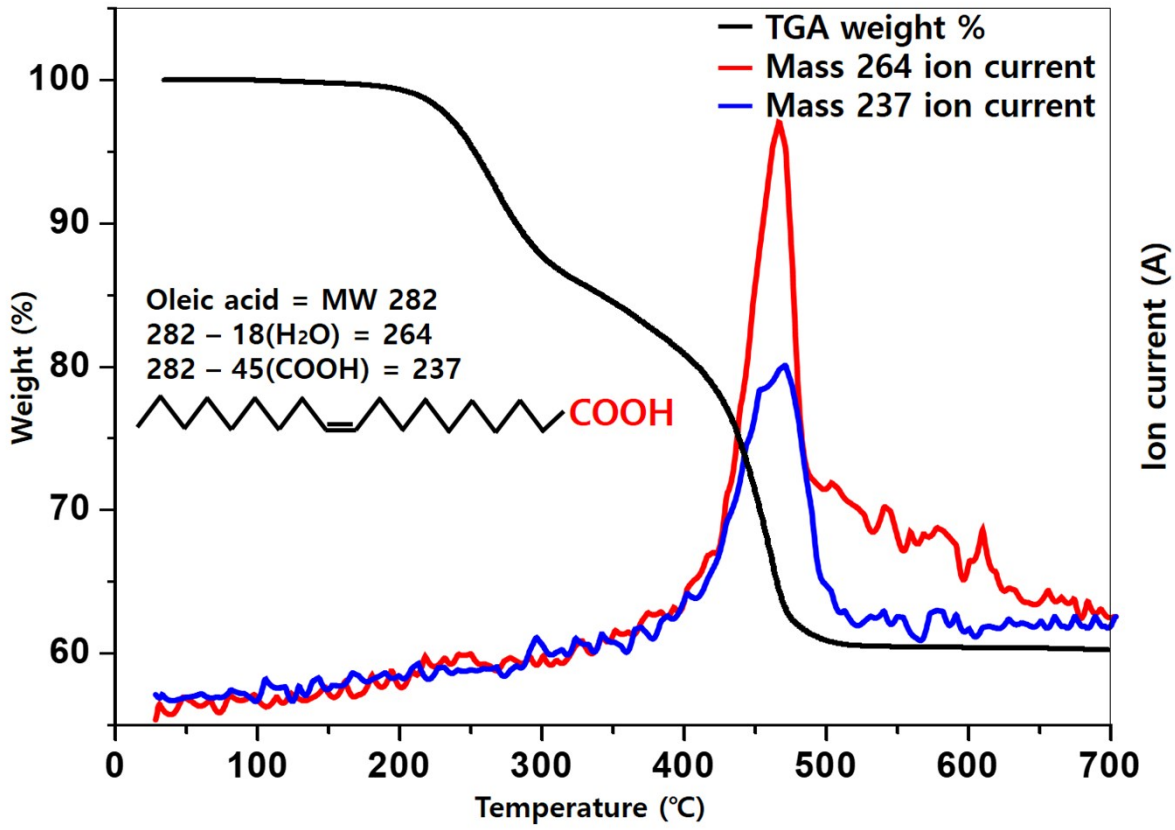

Figure S3. TGA spectrum of dithiol exchanged QD and STA-Mass spectrum of 264 m/z ion and 237 m/z ion.

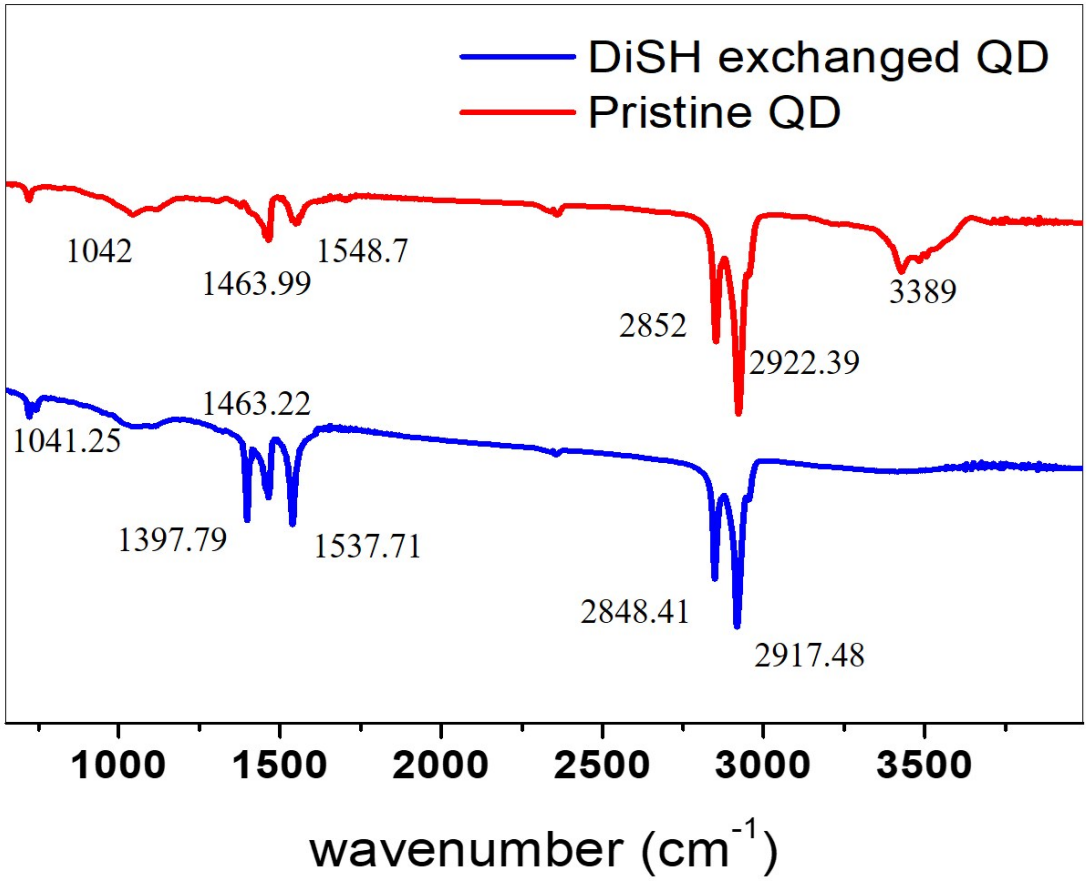

Figure S4. FT-IR spectrum of pristine and dithiol exchanged QD.

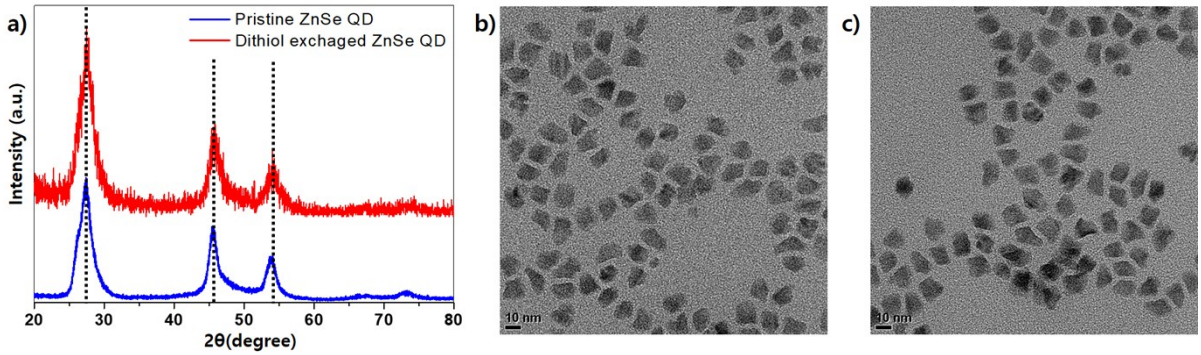

Figure S5. (a) XRD spectrum of pristine and dithiol exchanged ZnSe QD.
TEM image of (b) pristine ZnSe QD and (c) dithiol ligand exchanged ZnSe QD.

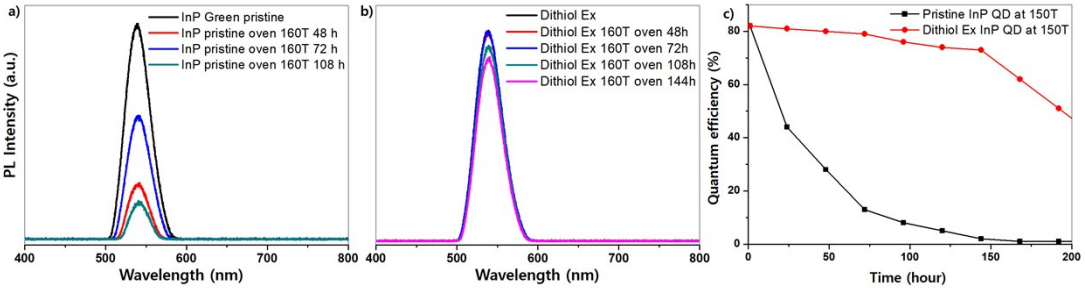

Figure S6. PL emission spectrum of 160°C tested QD (a) pristine InP QD, (b) dithiol ligand exchanged QD, (c) plot of PL QY change

	C(carbon) %	H(hydrogen) %	S(sulfur) %
Reference QD #1	**72.314**	**11.843**	**1.8794**
Reference QD #2	**71.394**	**11.776**	**1.8847**
Dithiol Ex QD #1	**63.299**	**10.487**	**4.9778**
Dithiol Ex QD #2	**64.119**	**10.582**	**4.5275**

Table S1. CHNS elemental analysis data of pristine InP QD and dithiol exchanged InP QD