Supporting Information:

Discriminating Cr(III) and Cr(VI) using aqueous CdTe quantum dots with various surface ligands

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Table S1. The average diameter of CdTe QDs in the presence of Cr(III) and Cr(VI), which is measured by DLS.

	PL peak position (nm)	Average diameter (nm)
Cr-free	560	7.3
5×10-5 M Cr(III)	578	22.2
2.5×10 ⁻⁴ M Cr(VI)	581	28.4

Fig. S1. The relative PL intensity (I/I_0) of CdTe QDs with different concentration of Cr(III) in the absence (black) and presence (red) of NaCl.



Fig. S2. Time course of the fluorescence of MPA-stabilized CdTe QDs in the absence of Cr(III) and Cr(VI), and in the presence of Cr(III) $(1 \ \mu M)$ or Cr(VI) $(1 \ \mu M)$.



Fig. S3. Effect of different metal ions on the relative PL intensity (I/I_0) of QD solutions. The concentration of metal ions is fixed at 1 μ M.





