

Supporting Information

Neurotoxin Quantum Dot Conjugates Detect Endogenous Targets Expressed in Live Cancer Cells

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Figure S1

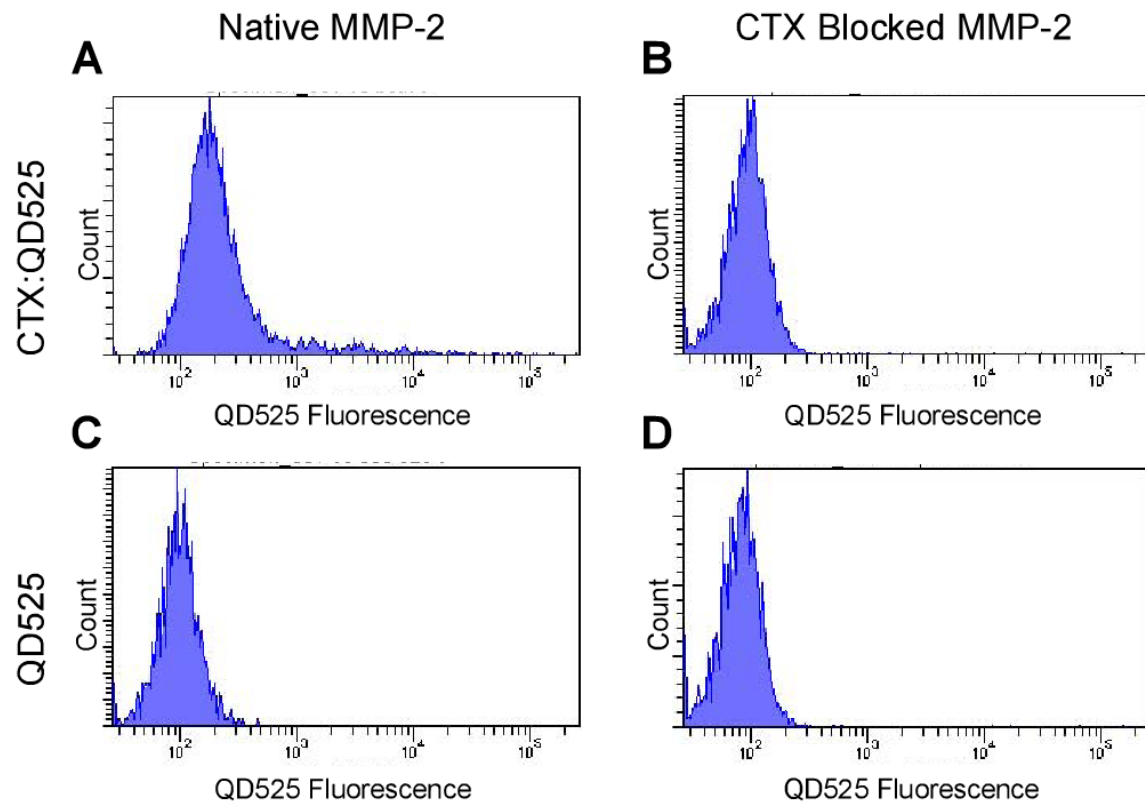


Figure S2

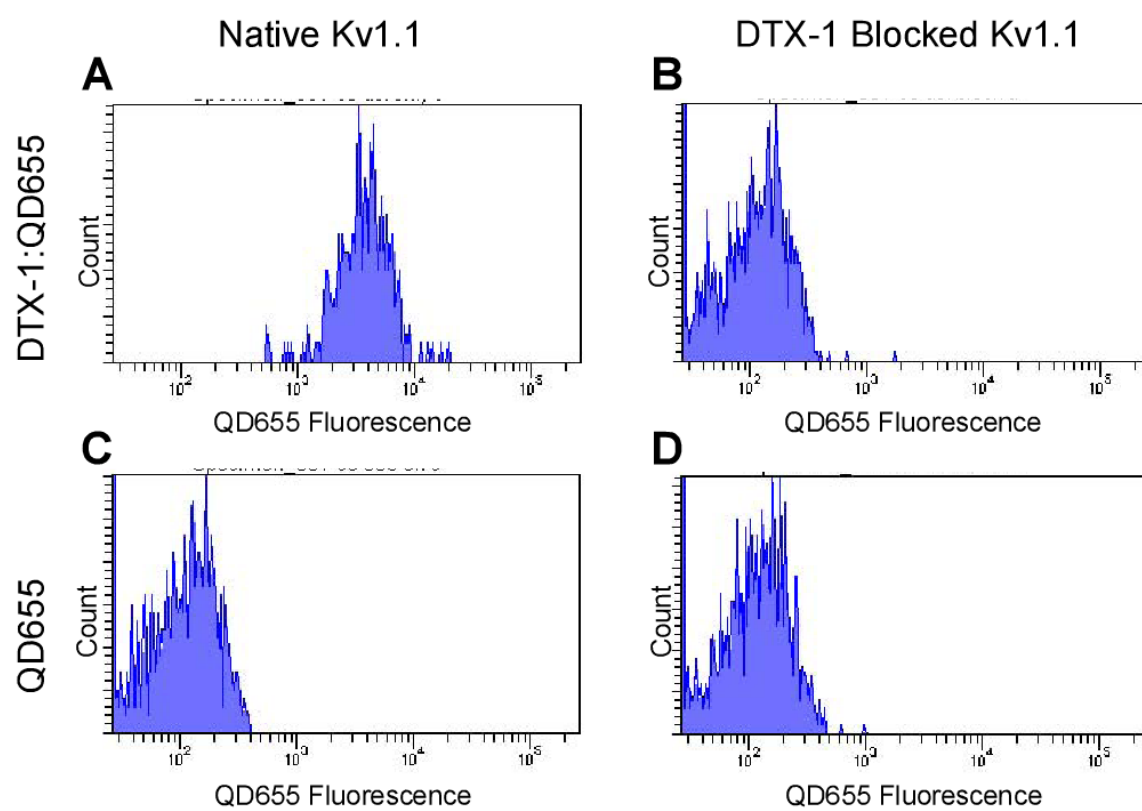


Figure S3

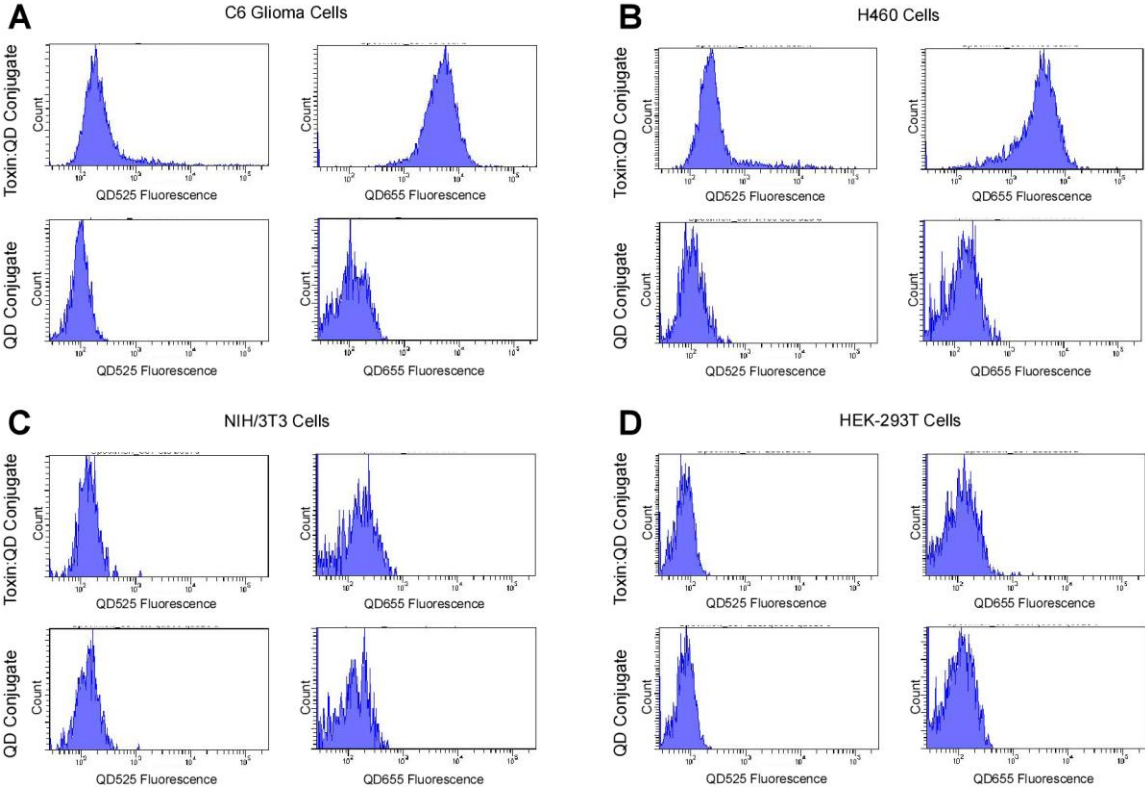


Figure S1: Flow cytometry histograms describing CTX:QD525 detection of MMP-2 within C6 glioma cell populations. MMP-2 is labeled by 10nM CTX:QD525 (A) when the conjugate is exposed to native, untreated cells. CTX:QD525 detection of MMP-2 is blocked by previous exposure to 200nM unconjugated CTX overnight (B). Labeled cell populations for CTX blocked CTX:QD525 are comparable to 10nM QD525 in both untreated (C) and CTX treated (D) C6 glioma cells.

Figure S2: Flow cytometry histograms describing DTX-1:QD655 detection of Kv1.1 within C6 glioma cell populations. Kv1.1 is labeled by 5nM DTX-1:QD655 (A) when the conjugate is exposed to native, untreated cells. DTX-1:QD655 detection of Kv1.1 is blocked by previous exposure to 100nM unconjugated DTX-1 overnight (B). Labeled cell populations for DTX-1 blocked DTX-1:QD655 are comparable to 5nM QD655 in both untreated (C) and DTX-1 treated (D) C6 glioma cells.

Figure S3: Flow cytometry histograms describing CTX:QD525 and DTX-1:QD655 detection of MMP-2 and Kv1.1, respectively, within C6 glioma (A), H640 (B), NIH/3T3

(C), and HEK-293T (D) cell populations. Both C6 glioma (A) and H460 (B) reveal labeling of MMP-2 by CTX:QD525 and Kv1.1 by DTX-1:QD655 conjugates in their cell populations. CTX:QD525 and DTX-1:QD655 detection of MMP-2 and Kv1.1, respectively, is less in NIH/3T3 (C) and HEK-293T (D) cells. Labeling levels in NIH/3T3 (C) and HEK-293T (D) cell lines were similar to 10nM QD525 and 5nM QD655 levels in all cell lines examined. The cells were exposed to 10nM CTX:QD525 and 5nM DTX-1:QD655 for 120 min. at 37°C and 5% CO₂.