

Supporting Information

Immuno-PET Imaging of the Programmed Cell Death-1 Ligand (PD-L1) Using a Zirconium-89 Labeled Therapeutic -Antibody, Avelumab

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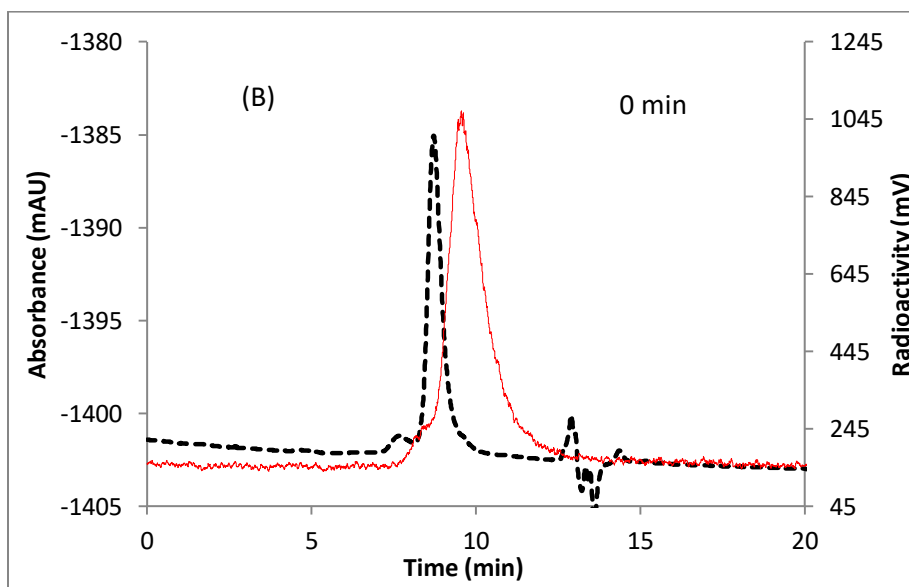
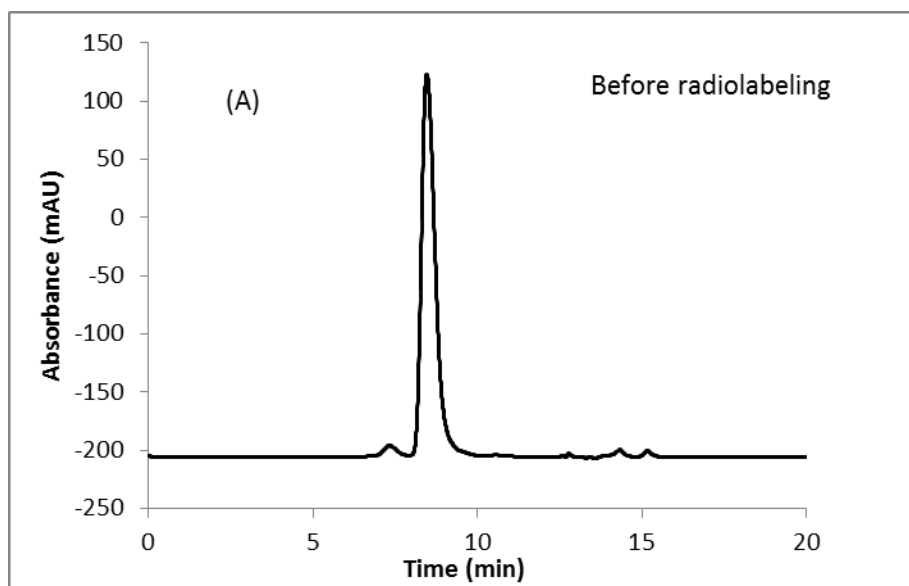
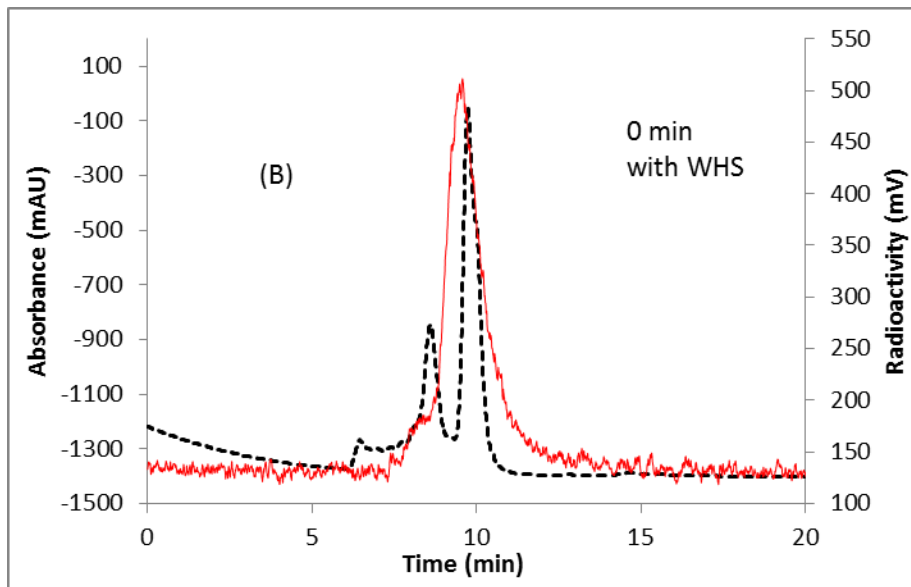
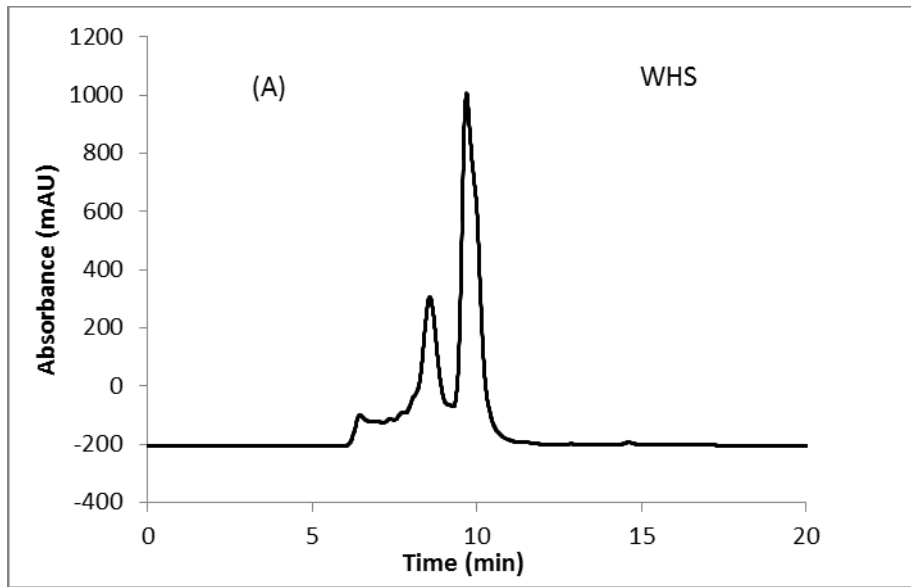


Figure S1 : HPLC chromatogram of (A) DFO-PD-L1 mAb, before radiolabeling; (B) [^{89}Zr]Zr-DFO-PD-L1 mAb. HPLC condition: eluent, 0.1 M sodium phosphate, 0.1 M sodium sulfate, 0.05% sodium azide, 10% *iso*-propyl alcohol (pH 6.8), flow rate 0.3 mL/min; black line UV detector, red line radiodetector.



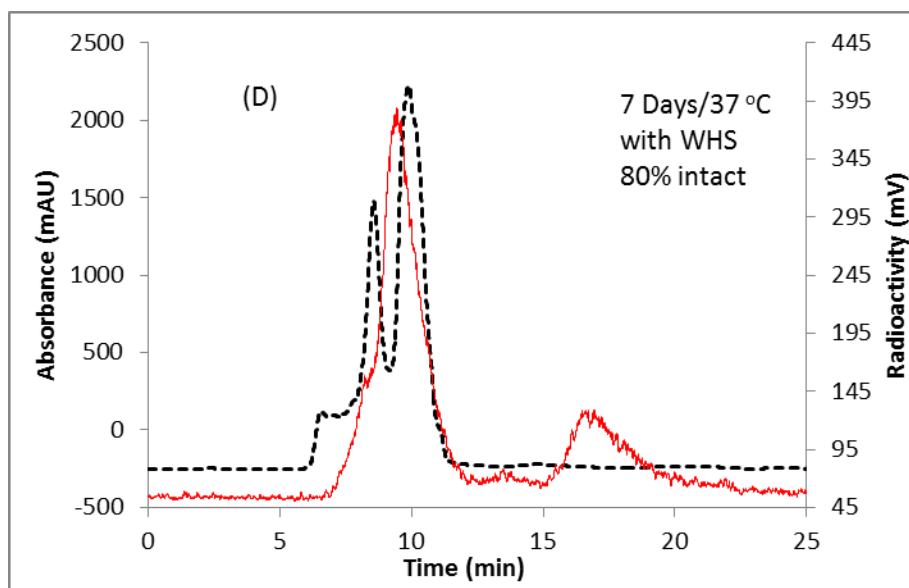
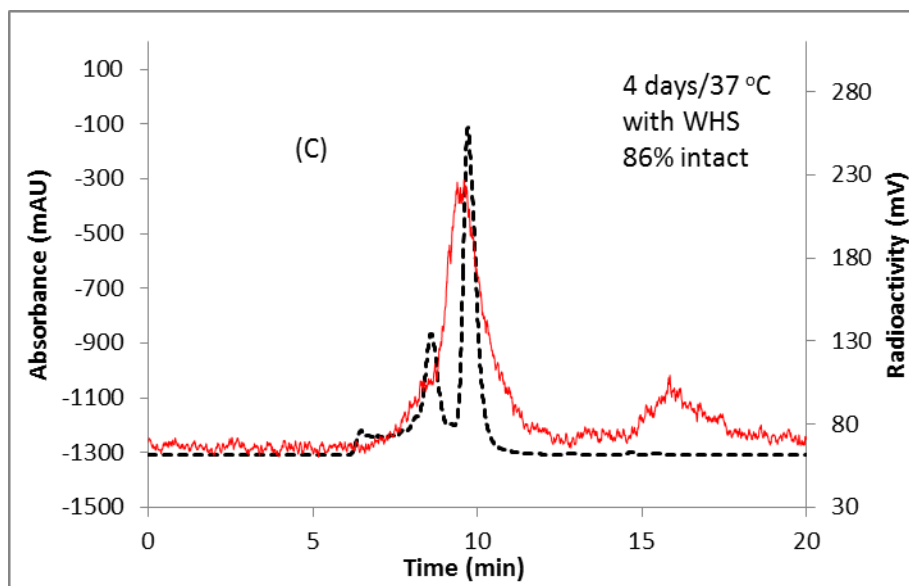


Figure S2: HPLC chromatogram of (A) whole human serum; (B) [^{89}Zr]Zr-DFO-PD-L1 mAb, 0 min; (C) [^{89}Zr]Zr-DFO-PD-L1 mAb, 4 days at 37 °C; (D) [^{89}Zr]Zr-DFO-PD-L1 mAb, 7 days at 37 °C. HPLC condition: eluent, 0.1 M sodium phosphate, 0.1 M sodium sulfate, 0.05% sodium azide, 10% *iso*-propyl alcohol (pH 6.8), flow rate 0.3 mL/min; black line UV detector, red line radiodetector.

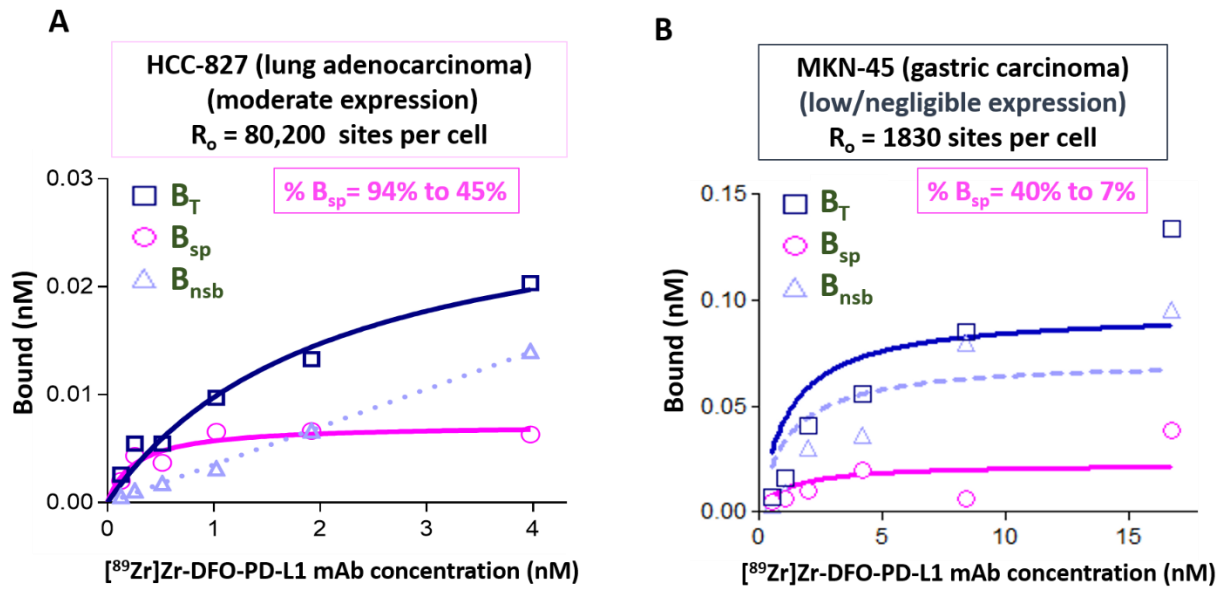


Figure S3: **A)** Representative in vitro $[^{89}\text{Zr}]\text{Zr-DFO-PD-L1}$ mAb saturation binding assay using HCC- 827 cells with each point representing the average of duplicates; **B)** Representative in vitro $[^{89}\text{Zr}]\text{Zr-DFO-PD-L1}$ mAb saturation binding assay using HCC- 827 cells with each point representing the average of duplicates; $B_T = B_{\text{Total}}$; $B_{sp} = B_{\text{specific}}$; $B_{nsb} = B_{\text{non-specific}}$ (determined in the presence of 10^{-6} M avelumab)