

Zr-NMOF Tagged with Heterobifunctionalized Aptamers for Sensitive and High-Dimensional Imaging Mass Cytometry

Supplementary Material includes:

Supplementary Figures

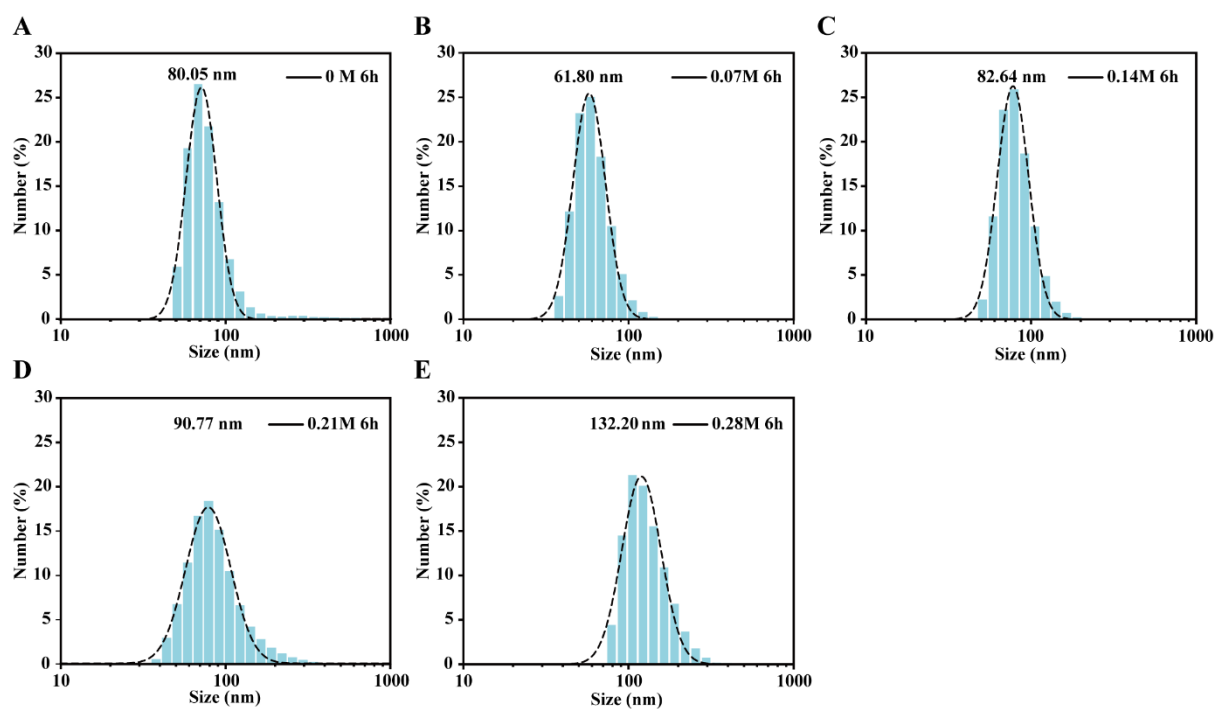


Figure S1 Hydrodynamic size analysis of Zr-NMOF synthesized with different concentrations of H₂O in DMF as modulators at a 6-h reaction time was measured by dynamic light scattering. (A) 0M 6h (B) 0.07M 6h (C) 0.14M 6h (D) 0.21M 6h (E) 0.28M 6h

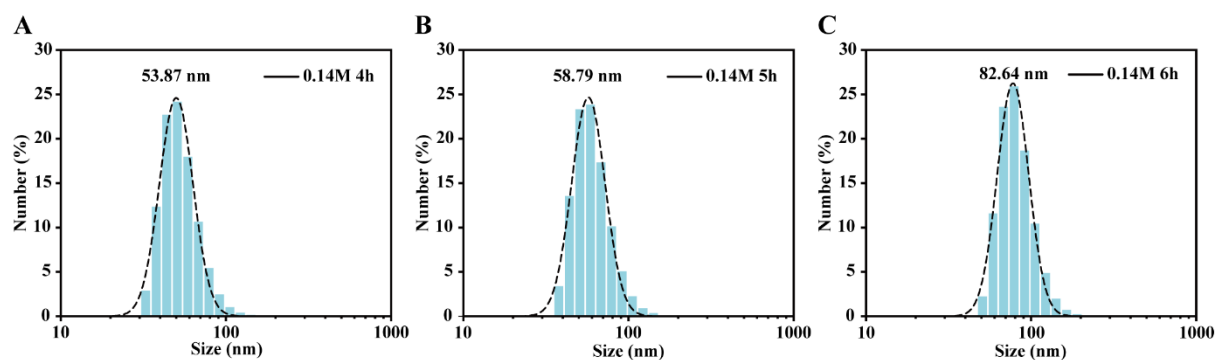


Figure S2 Hydrodynamic size analysis of Zr-NMOF synthesized with 0.14M of water as modulators at different reaction time was measured by dynamic light scattering. (A) 0.14M 4h (B) 0.14M 5h (C) 0.14M 6h

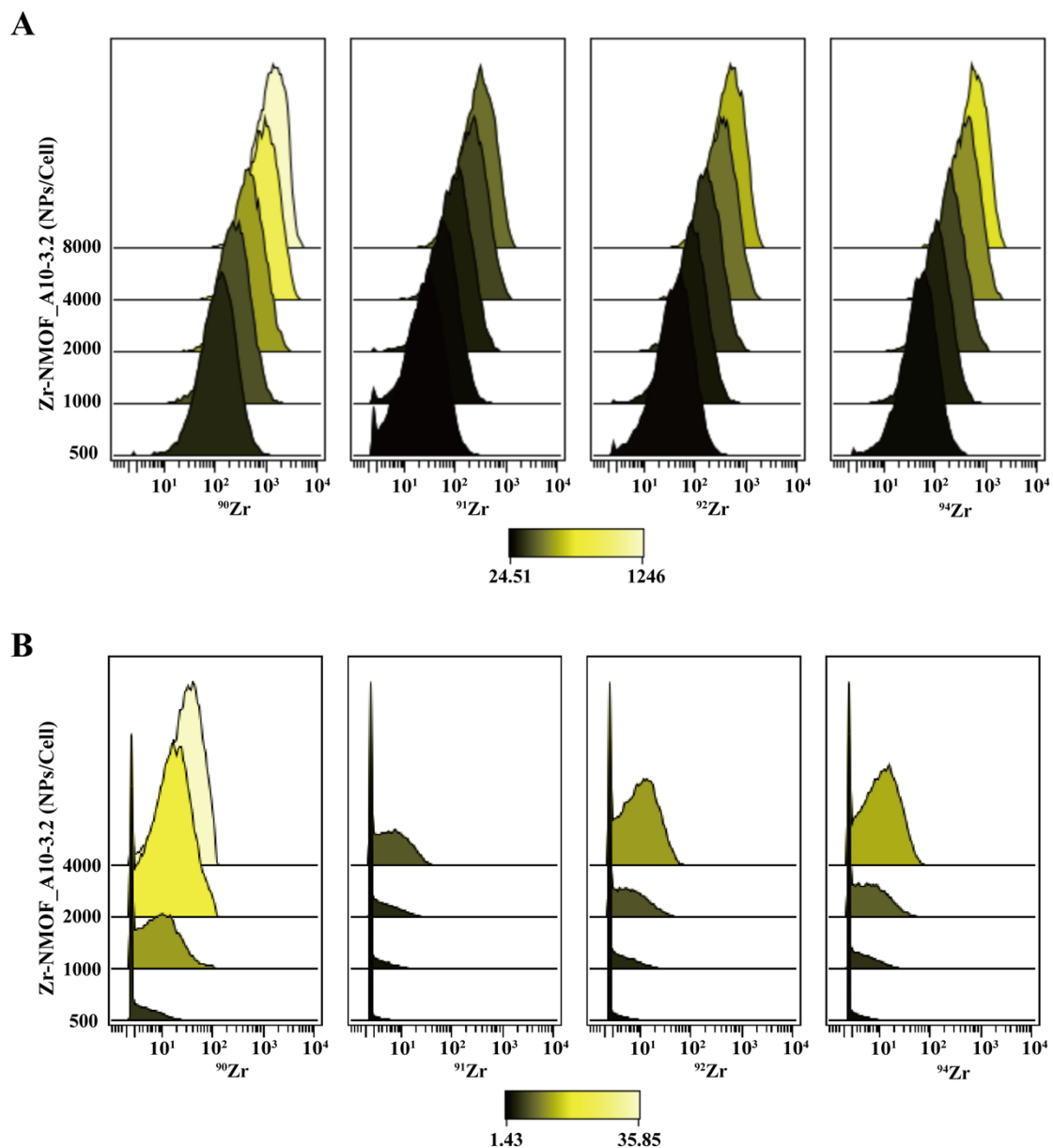


Figure S3 Histograms of Zr-NMOF_A10-3.2 stained (A) LNCAP and (B) PC-3 with four Zr channels

Supplementary Tables

Table S1 Atomic ratio of Zr-NMOF measured by XPS

	Zr 3d(%)	C 1s(%)	O 1s(%)
Zr-NMOF	5.2	59.65	35.15

Table S2 Hybrid panel of Maxpar X8 metal-tagged antibodies and Zr-NMOF_APT. labeled aptamers for multiplex PaC tissue section imaging

Reagent	Name-metal	Clone	Marker	Vendor
Maxpar antibodies	α -SMA- ¹⁵⁸ Gd	1A4	Stromal	Abcam
	E-CAD- ¹⁶⁸ Er	4A2	Epithelial	Abcam
	CK19- ¹⁶⁹ Tm	---	Epithelial	Abcam
	CD68- ¹⁷⁴ Yb	---	Macrophage	Abcam
Zr-NMOF_APT.	PSMA-Zr-NMOF- ⁹⁰ Zr	---	Proliferating	Sangon Biotech
Cell identification	DNA intercalator- ¹⁹¹ Ir/ ¹⁹³ Ir	---	Nuclei	Fluidigm