

## Supporting information

### Simultaneous Detection of Two Subtypes of Extracellular Vesicles by ultrabright fluorescent nanosphere-based test strips

Zhi-Hua Li<sup>a#</sup>, Xing-Chi Liu<sup>b#</sup>, Dan Wang<sup>a#</sup>, Zhi-Ling Zhang<sup>a</sup>, Gang Chen<sup>b,c,d,e</sup>, Zi-Li Yu<sup>b,c,\*</sup>, Zhi-Quan Tian<sup>a,f\*</sup>

<sup>a</sup> College of Chemistry and Molecular Sciences, Wuhan University, Wuhan 430072, China

<sup>b</sup> State Key Laboratory of Oral & Maxillofacial Reconstruction and Regeneration, Key Laboratory of Oral Biomedicine Ministry of Education, Hubei Key Laboratory of Stomatology, School & Hospital of Stomatology, Wuhan University

<sup>c</sup> Department of Oral and Maxillofacial Surgery, School and Hospital of Stomatology, Wuhan University, Wuhan 430079, China

<sup>d</sup> TaiKang Center for Life and Medical Sciences, Wuhan University, Wuhan 430071, China

<sup>e</sup> Frontier Science Center for Immunology and Metabolism, Wuhan University, Wuhan 430071, China.

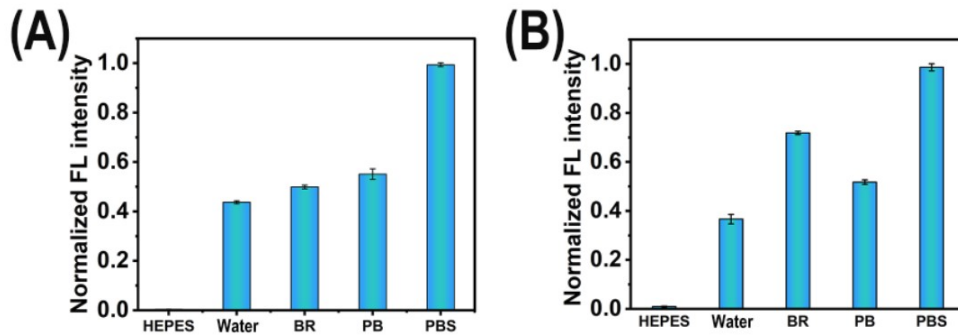
<sup>f</sup> Key Laboratory of Environmental Engineering and Pollution Control on Plateau (Tibet Autonomous Region), School of Ecology and Environment, Tibet University, Lhasa 850000, China

<sup>#</sup>These authors contributed equally to this work.

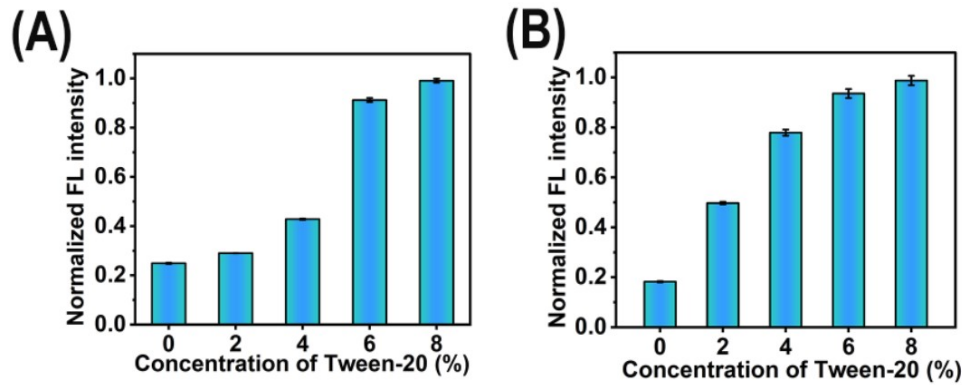
#### \*Corresponding Author

Zi-Li Yu (zili09@whu.edu.cn); Zhi-Quan Tian (zqtian@whu.edu.cn)

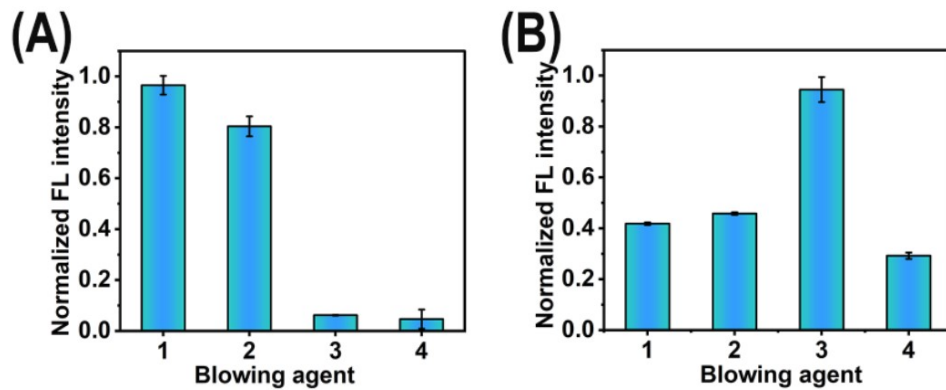
## Supporting Figures



**Figure S1.** Optimization of different solvents in unfolding agent. (A) Solvent optimization for FNs-EpCAM-mAb fluorescent probe. (B) Solvent optimization for FNs-CD45-mAb fluorescent probe.



**Figure S2.** Optimization of Tween-20 concentration. (A) Optimization of Tween-20 concentration for FNs-EpCAM-mAb fluorescent probe. (B) Optimization of Tween-20 concentration for FNs-CD45-mAb fluorescent probe.



**Figure S3.** Optimization of blowing agents. (A) Optimization of blowing agents for FNs-EpCAM-mAb fluorescent probes. (B) Optimization of blowing agents for FNs-CD45-mAb fluorescent probes.