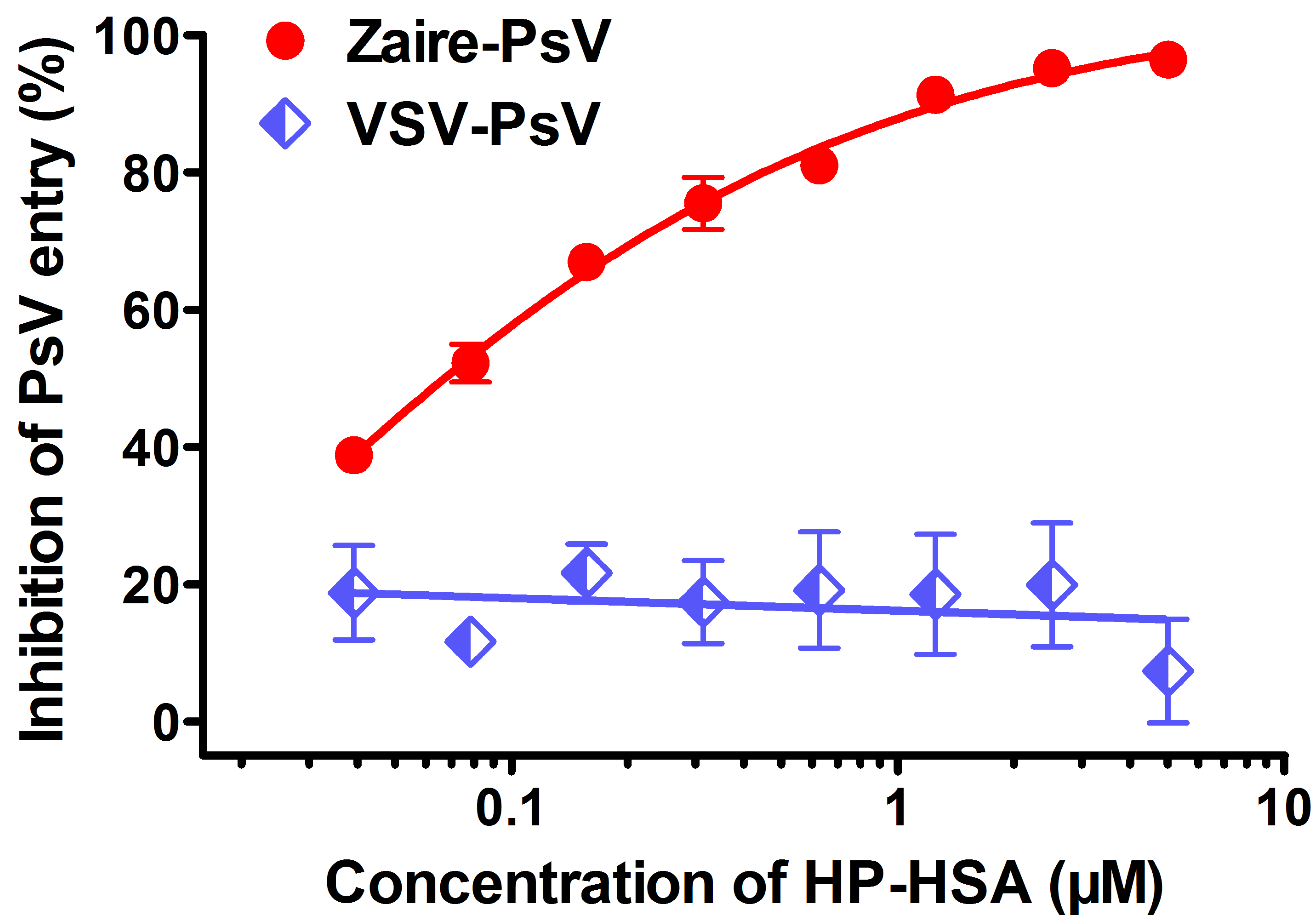
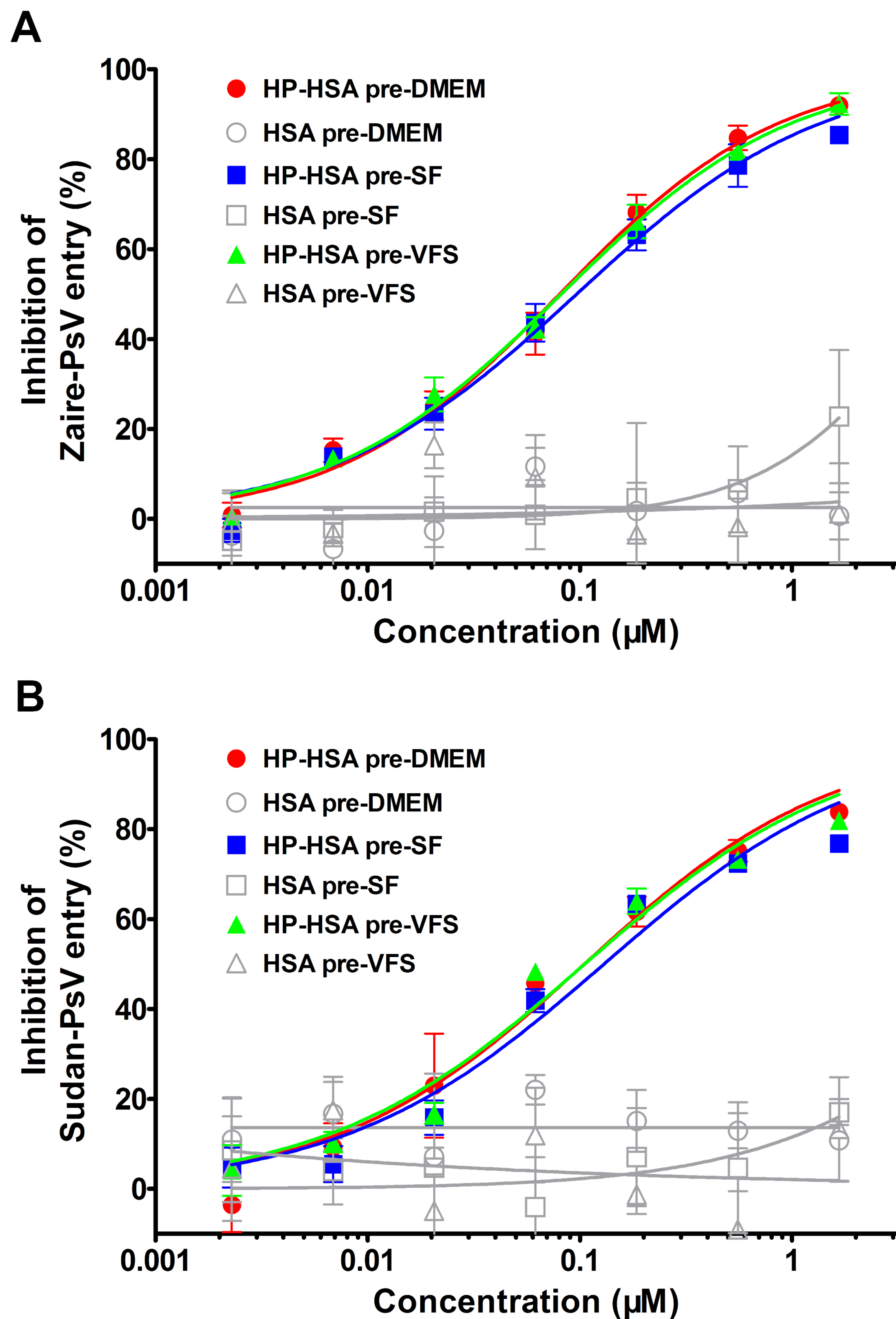


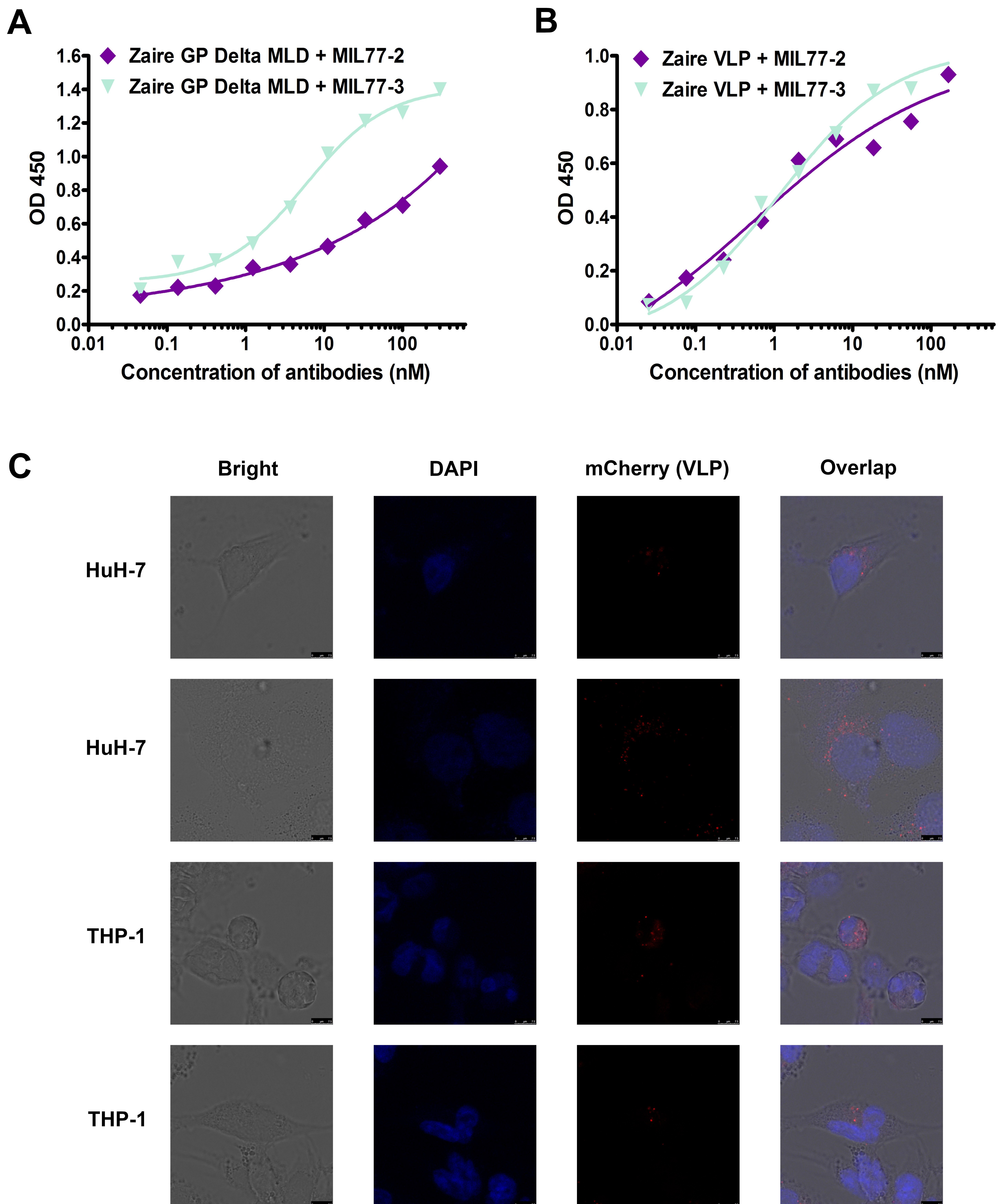
Supplementary Materials:



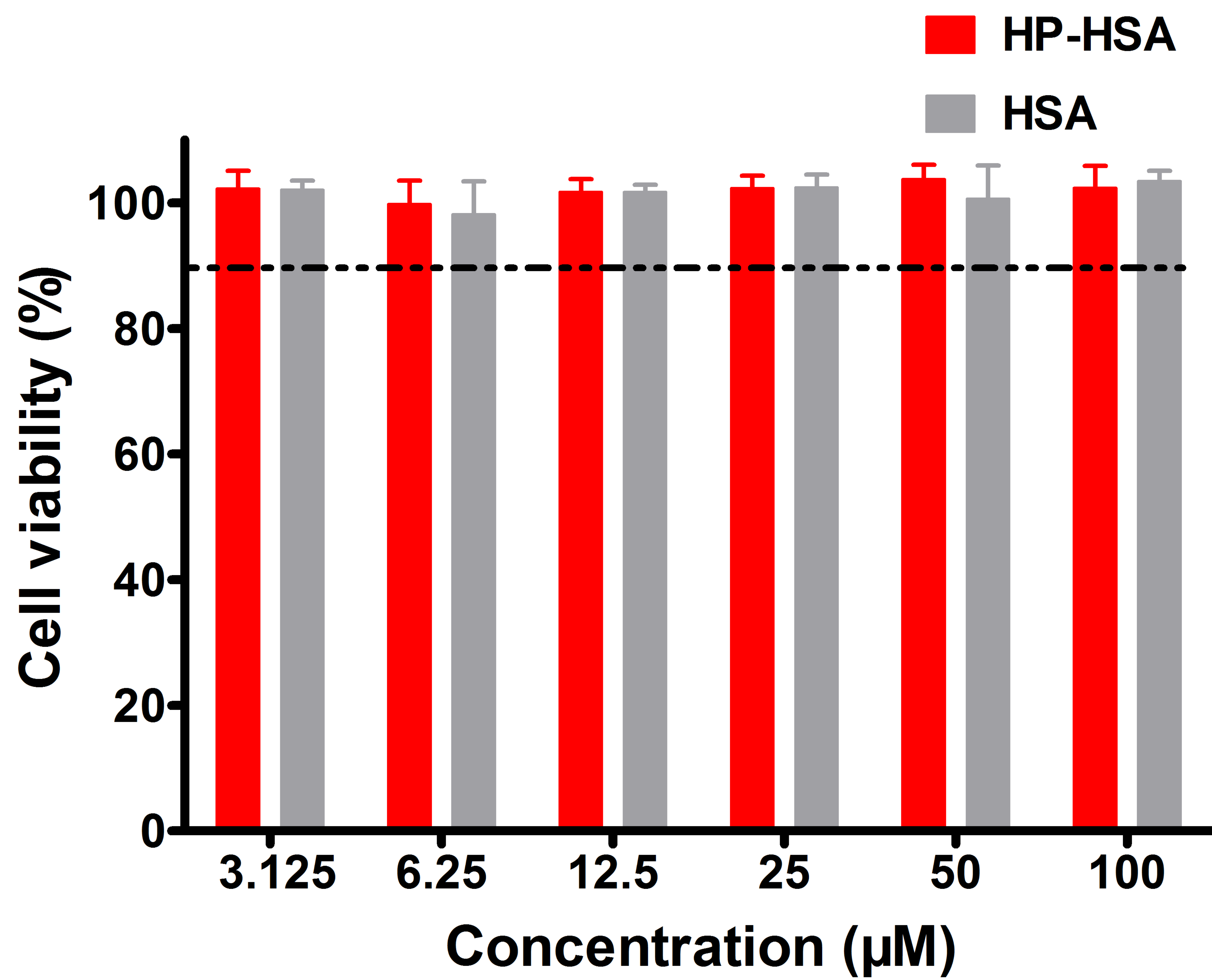
**FIG S1** Comparison of entry inhibitory activity of HP-HSA on Zaire pseudovirus and VSV pseudovirus. HuH-7 cells were served as target cell. The experiments were performed in triplicate, and the error bars indicate standard deviations.



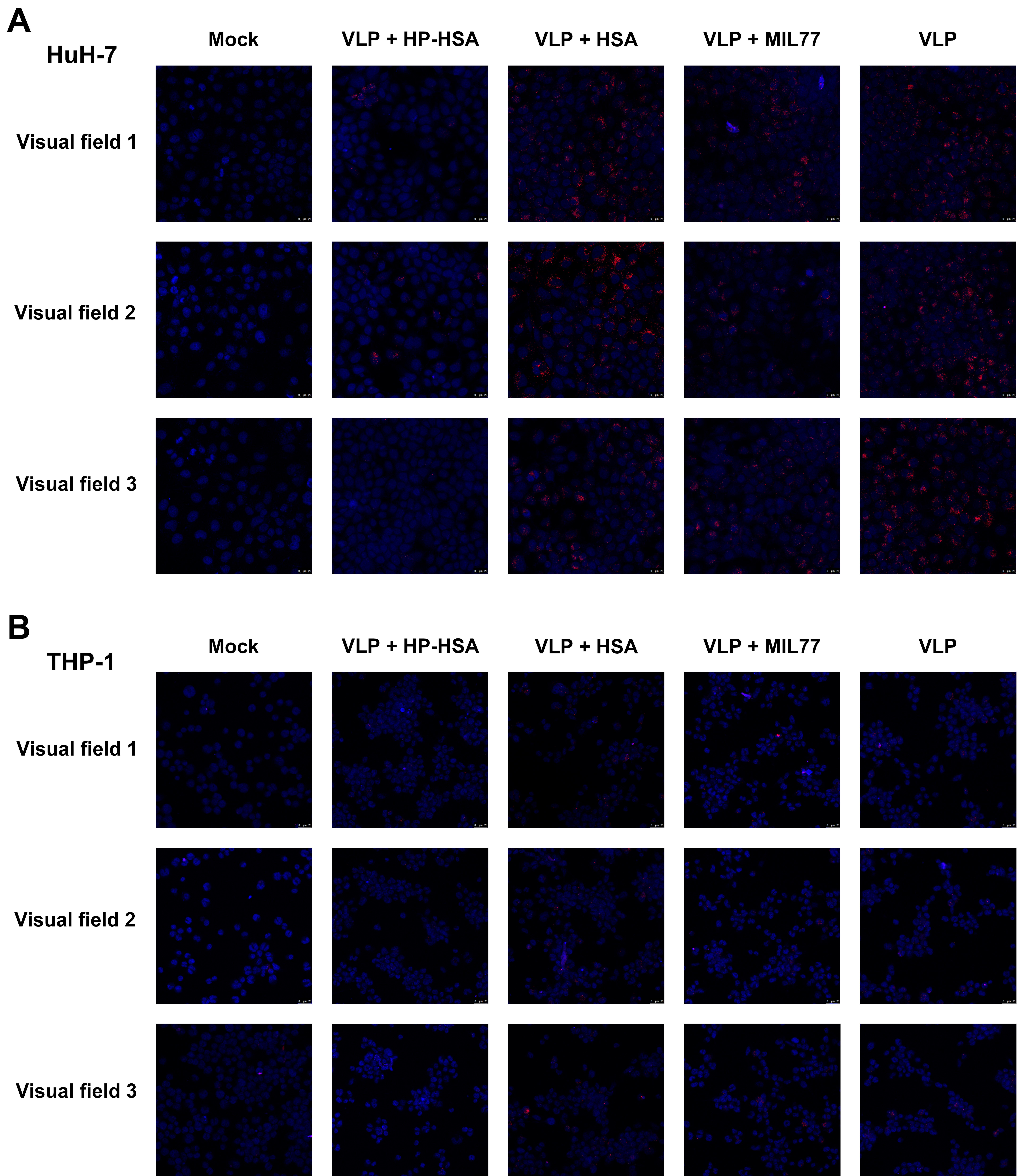
**FIG S2** The entry inhibitory activity of HP-HSA in human seminal fluid and VFS against EBOV-PsVs. HP-HSA and HSA were preincubated with DMEM, human seminal fluid (SF) or vaginal fluid simulant (VFS), respectively, before gradient dilution (“pre-” means “preincubated with”). The inhibitory activities of the premixed samples was evaluated with Zaire-PsV (A) and Sudan-PsV (B). All the experiments were performed in triplicate, and the error bars indicate standard deviations.



**FIG S3** The purified soluble Zaire GP (with a deletion of 314 - 462 aa and 637 - 676 aa) (A) and concentrated VLPs (B) were recognized by antibodies MIL77-2 and MIL77-3. The images of cells infected with mCherry-labeled Zaire-VLPs were captured by laser scanning confocal microscope and displayed as single channel images or merged images (C).

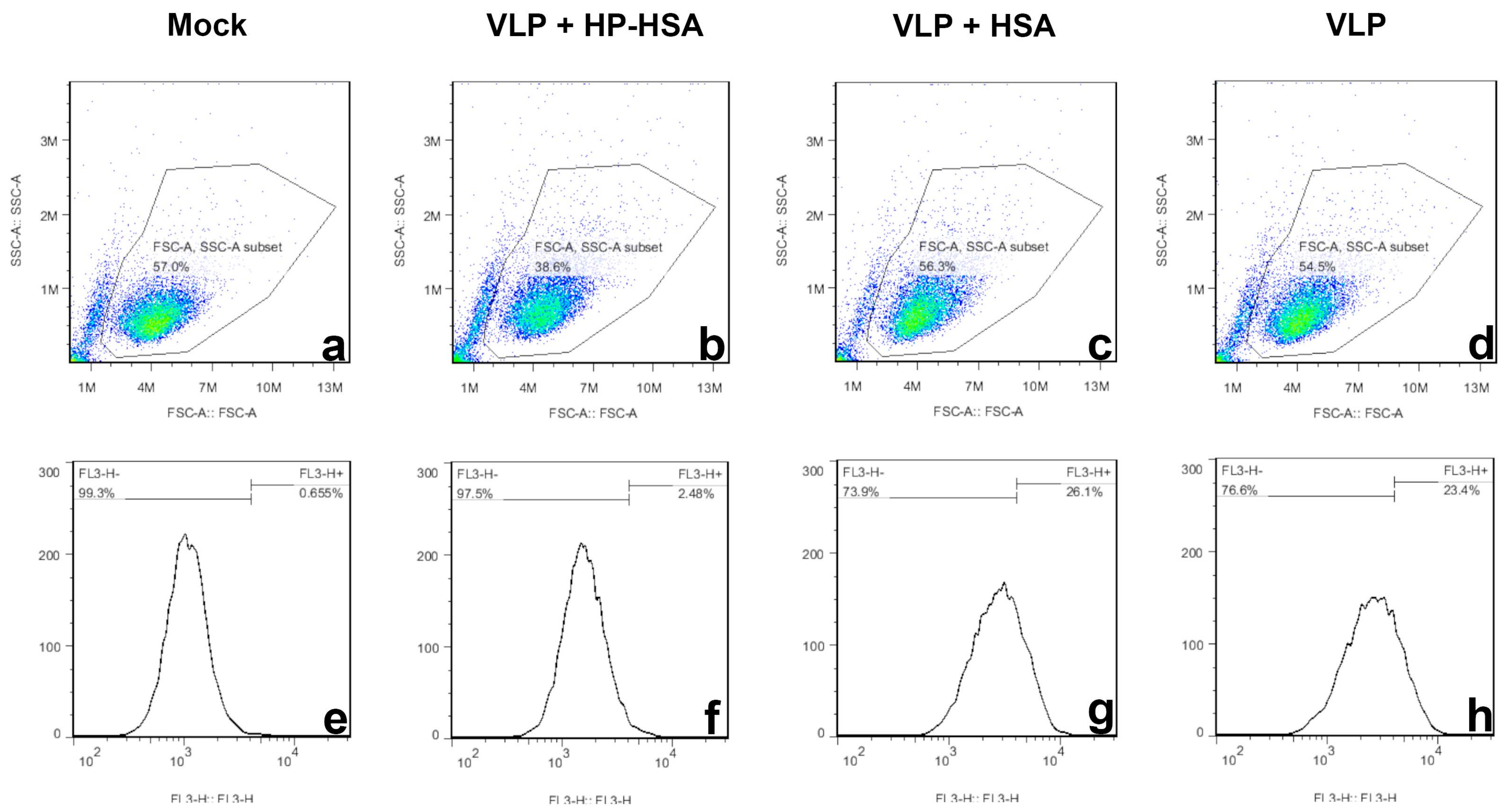


**FIG S4** The cytotoxicity of HP-HSA to differentiated human THP-1 cells was measured by CCK-8 cytotoxicity assay. The unmodified HSA was served as control. All the experiments were performed in triplicate, and the error bars indicate standard deviations.



**FIG S5** The raw images (merged by DAPI channel and mCherry channel) applied for the analysis of Figure 6A.

The visual fields of different samples were arranged in (A) for HuH-7 cell and (B) for differentiated THP-1 cell.



**FIG S6** The raw data of flow cytometry for the Figure 6B. The intact cells from different samples gated in (a-d) were further used to count the number of mCherry positive cells (e-h).

**DATASET.S1** The raw data of fluorescent images applied for Fig. 6A-a (HuH-7 cells) output by Image J.

Sample	Visual Field	Area	IntDen	MinThr	MaxThr	CellNum	Area/CellNum	IntDen/CellNum
Mock	1	0	N/A	0	200	151	0.00	N/A
	2	0	N/A	0	200	97	0.00	N/A
	3	0	N/A	0	200	113	0.00	N/A
VLP + HP-HSA	1	1687	256189	0	200	147	11.48	1742.78
	2	2441	354513	0	200	156	15.65	2272.52
	3	291	43434	0	200	231	1.26	188.03
VLP + HSA	1	19247	2920827	0	200	179	107.53	16317.47
	2	24550	3404812	0	200	125	196.40	27238.50
	3	12236	1882591	0	200	143	85.57	13164.97
VLP + MIL77	1	13352	2079565	0	200	169	79.01	12305.12
	2	4669	758151	0	200	167	27.96	4539.83
	3	9848	1502177	0	200	187	52.66	8033.03
VLP	1	17053	2624626	0	200	219	77.87	11984.59
	2	19930	2983948	0	200	256	77.85	11656.05
	3	25642	3834110	0	200	148	173.26	25906.15
<b>Area:</b> the fluorescence positive area in each image								
<b>IntDen:</b> Intergated density								
<b>MinThr:</b> minimum threshold								
<b>MaxThr:</b> maximum threshold								
<b>CellNum:</b> the cell numbers of each image								

**DATASET.S2** The raw data of fluorescent images applied for Fig. 6A-b (differentiated THP-1 cells) output by Image J.

Sample	Visual Field	Area	IntDen	MinThr	MaxThr	CellNum	Area/CellNum	IntDen/CellNum
Mock	1	73	12132	0	200	114	0.64	106.42
	2	367	62821	0	200	100	3.67	628.21
	3	679	97894	0	200	249	2.73	393.15
VLP + HP-HSA	1	637	96462	0	200	255	2.50	378.28
	2	318	49723	0	200	193	1.65	257.63
	3	329	54737	0	200	150	2.19	364.91
VLP + HSA	1	1330	192409	0	200	158	8.42	1217.78
	2	2083	335501	0	200	233	8.94	1439.92
	3	1840	261216	0	200	176	10.45	1484.18
VLP + MIL77	1	2111	304144	0	200	189	11.17	1609.23
	2	1271	173336	0	200	170	7.48	1019.62
	3	1277	196571	0	200	152	8.40	1293.23
VLP	1	1279	193118	0	200	184	6.95	1049.55
	2	1190	181284	0	200	132	9.02	1373.36
	3	1122	176951	0	200	152	7.38	1164.15
<b>Area:</b> the fluorescence positive area in each image								
<b>IntDen:</b> Intergated density								
<b>MinThr:</b> minimum threshold								
<b>MaxThr:</b> maximum threshold								
<b>CellNum:</b> the cell numbers of each image								

**DATASET.S3** The raw data of fluorescent images applied for Fig. 6C (HuH-7 cells) output by Image J.

Sample	Visual Field	Area	IntDen	MinThr	MaxThr	CellNum	Area/CellNum	IntDen/CellNum
Mock	1	8	1543	0	200	116	0.07	13.30
	2	26	4695	0	200	119	0.22	39.45
	3	1	179	0	200	122	0.01	1.47
VLP + HP-HSA	1	35	5984	0	200	110	0.32	54.40
	2	75	11889	0	200	105	0.71	113.23
	3	35	5406	0	200	113	0.31	47.84
VLP + HSA	1	473	65585	0	200	103	4.59	636.75
	2	463	59640	0	200	110	4.21	542.18
	3	642	88770	0	200	97	6.62	915.15
VLP	1	290	41041	0	200	132	2.20	310.92
	2	262	33548	0	200	99	2.65	338.87
	3	308	44502	0	200	91	3.38	489.03
<b>Area:</b> the fluorescence positive area in each image								
<b>IntDen:</b> Intergated density								
<b>MinThr:</b> minimum threshold								
<b>MaxThr:</b> maximum threshold								
<b>CellNum:</b> the cell numbers of each image								