Supplemental Material

Comparison of Three Low-Molecular-Weight Fluorescent Probes for Measuring Free Zinc Levels in Cultured Mammary Cells

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Suppl.-Table S1: P Values of significance test (two-Way ANOVA with Dunnett´s multiple comparisons test) for zinc uptake measured with FZ3 (Figure 2).

t	MCF 7		MDA-MB 231		T47D		MCF 10A	
	significance [p value to control at time t]		significance [p value to control at time t]		significance [p value to control at time t]		significance [p value to control at time t]	
	25 µM $ZnSO_4$	50 µM $ZnSO_4$	25 µM $ZnSO_4$	50 µM $ZnSO_4$	25 µM $ZnSO_4$	50 µM $ZnSO_4$	25 µM $ZnSO_4$	50 µM $ZnSO_4$
0	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99
3	0.92	>0.99	0.97	0.9	0.95	0.94	0.82	0.89
6	0.97	>0.99	0.99	0.91	0.66	0.96	0.94	0.87
9	0.84	>0.99	0.89	0.78	>0.99	0.94	>0.99	>0.99
12	<0.001	<0.001	0.03	<0.001	<0.001	<0.001	<0.001	<0.001
15	0.003	<0.001	0.04	<0.001	<0.001	<0.001	<0.001	<0.001
18	<0.001	<0.001	0.02	<0.001	<0.001	<0.001	<0.001	<0.001
21	<0.001	<0.001	0.03	<0.001	<0.001	<0.001	<0.001	<0.001
24	<0.001	<0.001	0.06	<0.001	<0.001	<0.001	<0.001	<0.001
27	<0.001	<0.001	0.03	<0.001	<0.001	<0.001	<0.001	<0.001
30	0.002	<0.001	0.05	<0.001	<0.001	<0.001	<0.001	<0.001
33	0.001	<0.001	0.07	<0.001	<0.001	<0.001	<0.001	<0.001
36	<0.001	<0.001	0.03	<0.001	<0.001	<0.001	<0.001	<0.001
39	0.004	<0.001	0.08	<0.001	<0.001	<0.001	<0.001	<0.001
42	0.002	<0.001	0.17	<0.001	<0.001	<0.001	<0.001	<0.001

Suppl.-Table S2: P Values of significance test (two-Way ANOVA with Dunnett´s multiple comparisons test) for zinc uptake measured with TSQ (Figure 4).

t	MCF 7		MDA-MB 231		T47D		MCF 10A	
	significance [p value to control at time t]		significance [p value to control at time t]		significance [p value to control at time t]		significance [p value to control at time t]	
	25 µM $ZnSO_4$	50 µM $ZnSO_4$	25 µM $ZnSO_4$	50 µM $ZnSO_4$	25 µM $ZnSO_4$	50 µM $ZnSO_4$	25 µM $ZnSO_4$	50 µM $ZnSO_4$
0	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99
3	0.64	0.72	0.98	0.95	>0.99	0.97	>0.99	0.97
6	0.76	0.76	0.94	0.86	>0.99	0.94	0,99	0.96
9	0.62	0.68	0.93	0.89	>0.99	0.93	>0,99	0.94
12	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
15	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
18	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
21	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
24	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
27	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
30	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
33	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
36	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
39	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
42	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Suppl.-Table S3: P Values of significance test (two-Way ANOVA with Dunnett´s multiple comparisons test) for zinc uptake measured with ZP1 (Figure 6).

t	MCF 7		MDA-MB 231		T47D		MCF 10A	
	significance [p value to control at time t]		significance [p value to control at time t]		significance [p value to control at time t]		significance [p value to control at time t]	
	25 µM $ZnSO_4$	50 µM $ZnSO_4$	25 µM $ZnSO_4$	50 µM $ZnSO_4$	25 µM $ZnSO_4$	50 µM $ZnSO_4$	25 µM $ZnSO_4$	50 µM $ZnSO_4$
0	0.86	0.94	0.99	0.97	>0.99	0.73	0.64	0.95
3	0.95	>0.99	>0.99	0.99	0.93	0.95	0.52	0.92
6	0.95	>0.99	>0.99	>0.99	0.89	0.96	0.7	0.86
9	0.95	>0.99	>0.99	>0.99	0.94	0.96	0.52	0.87
12	0.03	0.03	0.53	0.07	0.009	0.001	0.94	0.57
15	0.003	0.002	0.42	0.01	0.005	<0.001	>0.99	0.06
18	<0.001	0.001	0.36	0.002	0.003	<0.001	>0.99	0.4
21	0.002	<0.001	0.43	0.11	<0.001	<0.001	>0.99	0.36
24	<0.001	<0.001	0.38	0.1	<0.001	<0.001	>0.99	0.31
27	<0.001	<0.001	0.39	<0.001	<0.001	<0.001	>0.99	0.18
30	<0.001	<0.001	0.4	0.04	<0.001	<0.001	>0.99	0.007
33	<0.001	<0.001	0.42	<0.001	<0.001	<0.001	>0.99	0.003
36	<0.001	<0.001	0.39	<0.001	<0.001	<0.001	0.89	0.002
39	<0.001	<0.001	0.39	0.03	<0.001	<0.001	0.45	0.13
42	<0.001	<0.001	0.39	<0.001	<0.001	<0.001	0.91	0.001