

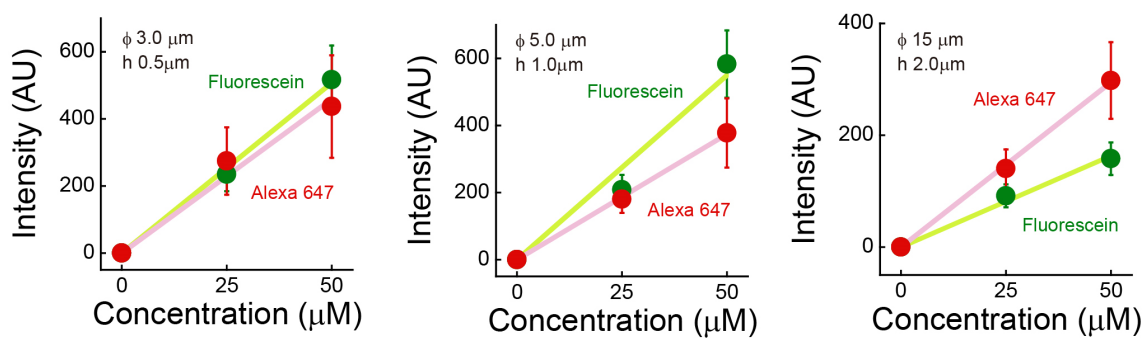
## Supplementary Information

### Arrayed water-in-oil droplet bilayers for membrane transport analysis

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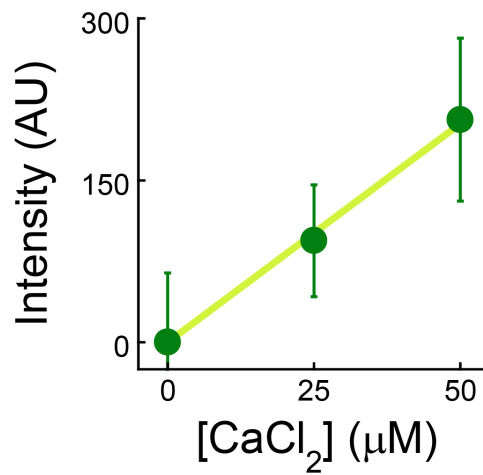
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### Supplementary Fig. S1 Fluorescent intensity of Fluorescein and Alexa 647

Dependence of fluorescent intensity of Fluorescein (green) and Alexa 488 (red) on their concentration. Left, middle, and right panels represent the results using the micro-wells with 3.0- $\mu\text{m}$  diameter and 0.5- $\mu\text{m}$  height, 5.0- $\mu\text{m}$  diameter and 1.0- $\mu\text{m}$  height, and 15- $\mu\text{m}$  diameter, and 2.0- $\mu\text{m}$  height, respectively. The data were fitted with linear functions (solid lines).



**Supplementary Fig. S2 Fluorescent intensity of Fluo 3 against Ca<sup>2+</sup> concentration**

Dependence of fluorescent intensity of 50 μM Fluo 3 on Ca<sup>2+</sup> concentration. The data, measured using the micro-well with 5.0-μm diameter and 1.0-μm height, was fitted with the linear function (solid line).