Supplementary Material

Quantitative super-resolution imaging for the analysis of GPCR oligomerization.

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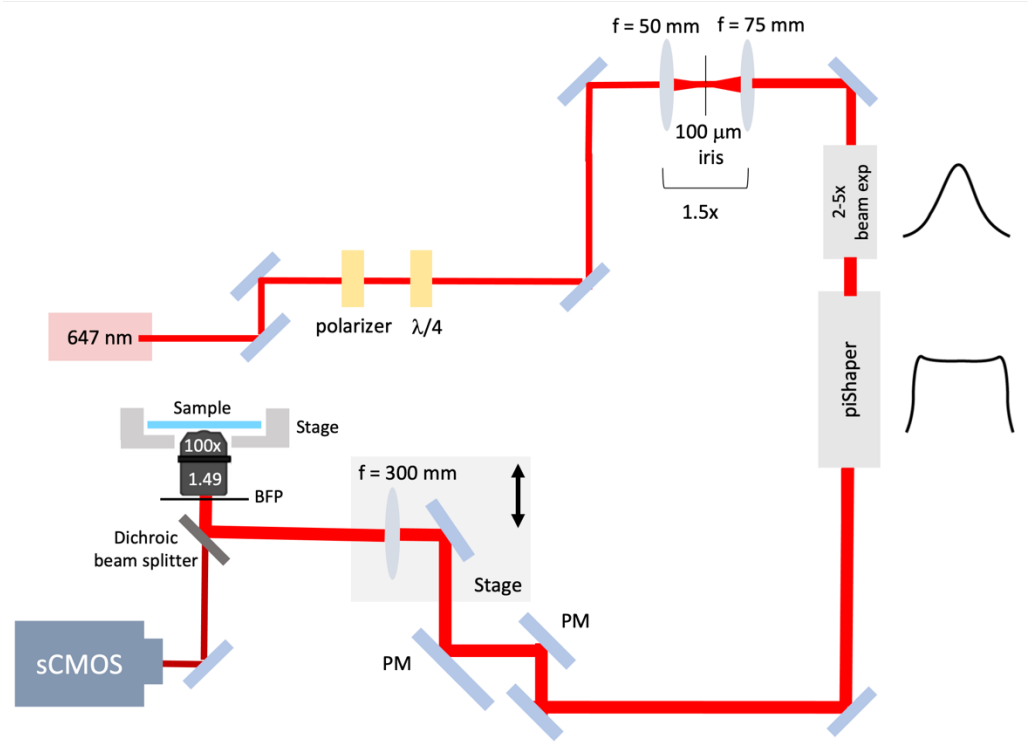

Figure S1. Schematic of custom-built super-resolution microscopy setup. Blue rectangles indicate dielectric mirrors, ellipses indicate lenses.

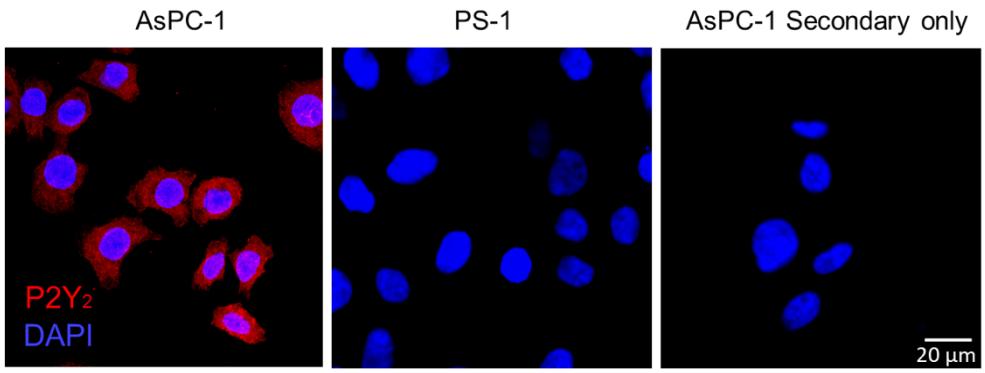

Figure S2. $P2Y_2$ and DAPI immunofluorescent staining of AsPC-1 and PS-1 cells for anti-$P2Y_2$ receptor antibody validation. AsPC-1 cells show bright red $P2Y_2$ staining compared to the low $P2Y_2$ expressing PS-1 cell line and a control using secondary antibody staining only. Images were taken with a confocal microscope. Contrasts setting are the same for all images.

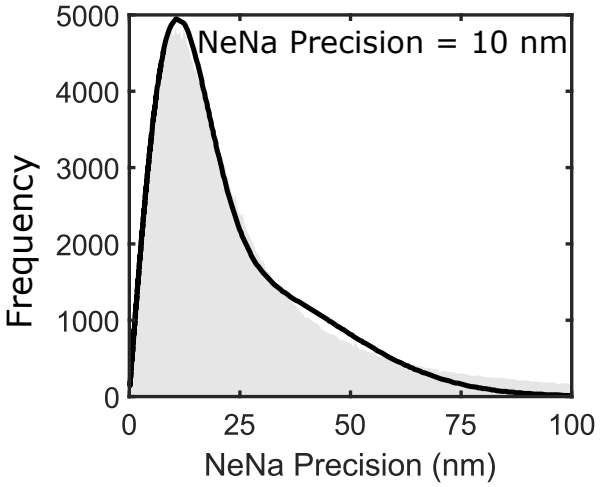

Figure S3. Overall localization precision of all super-resolution DNA-PAINT images. Nearest-Neighbour (NeNa) based analysis was used to determine this precision number.

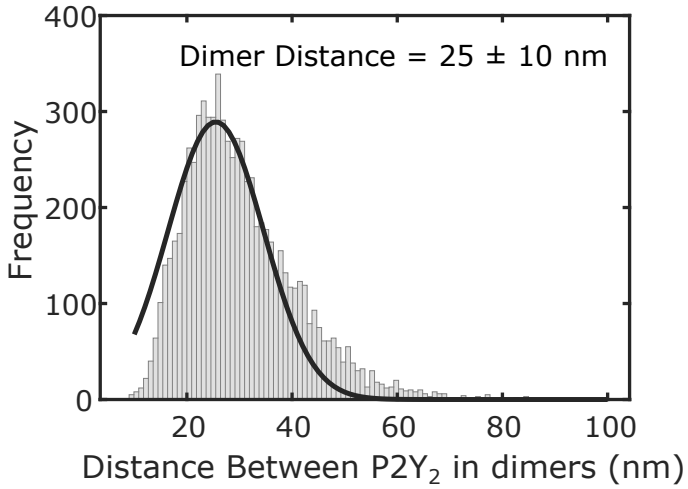

Figure S4. Distance between $P2Y_2$ receptors in dimers. Calculated from $P2Y_2$ receptors in dimers - pooled from all ROIs in every condition (control, agonist and antagonist treated AsPC-1 cells) as determined by the qPAINT analysis pipeline via *k*-means clustering analysis.