

**Figure 4-figure supplement 1.** Determining the background counts in an *ssrB* null strain in the absence of PAmCherry. The average localization counts for the strain lacking PAmCherry was 4 localizations/m2 (n = 66 cells). The number of localizations in the PAmCherry-SsrB *phoP::kan* strain was 16/m2 (Fig 4). Thus, it is apparent that we can detect SsrB molecules in the *phoP* null background. It is worth noting that it was difficult to image the strain, as the extremely low levels of fluorescence made it especially difficult to identify the correct imaging plane. Thus, some of the background signals might be coming from the coverglass itself.