

**Figure 2 - figure supplement 5. Comparison of localization of the CD19::Nrx, nSyb::CD19 and CD19::sdc ligands into presynaptic sites in the ORNs targeting DA1.**

Different intracellular and transmembrane domains (from Nrx, nSyb, and sdc) were fused to CD19 and expressed into ORNs targeting the DA1 glomerulus using the CD19::Nrx (top panels), nSyb::CD19 (middle panels) and CD19::Sdc (bottom panels), with the R17H02 driver (in green). The brain samples were co-immunostained with antibodies against the OLLAS tag (present in the ligand) and against the pre-synaptic protein, BRP (in magenta). The ligand proteins are co-localized with or adjacent to BRP (arrows), demonstrating that all ligands are enriched at the presynaptic terminals of the ORNs, but CD19::Nrx was also expressed at strong levels in the axon shaft outside of the glomerulus (arrowheads in top panels). Scale bar= 20μm