Supplemental Figure S3
Figure S3: Control experiments to demonstrate iBLINC specificity.

A. – C. Epifluorescent micrographs of the head region of transgenic animals expressing all three iBLINC constructs (A), the postsynaptic AP::NLG-1/neuroligin with the streptavidin ‘detector’ fusion (B), or the presynaptic BirA::NRX-1/neurexin with the streptavidin ‘detector’ fusion (C). Scale bar indicates 20 µm and anterior is to the left in all micrograph panels. The image in (A) is identical as in Figure 1D and shown for comparison only.

D. Epifluorescent micrograph of the head region of transgenic animals expressing the NRX-1 fusion with AP (instead of BirA) presynaptically and the NLG-1 fusion with BirA (instead of AP) also results in a signal albeit with reduced strength.

E. – F. Epifluorescent micrographs of the head region of transgenic animals expressing the iBLINC constructs using monomeric streptavidin fused to tandem superfolder GFP (2xsfGFP) as a detector instead of tagRFP (E, dzEx1330). The corresponding detector alone (F, dzIs66) shows no signal.

G. – H. Epifluorescent micrographs of the head region of transgenic animals expressing the iBLINC constructs, but secreting the detector from the intestine using the Pelt-2 promoter instead of the Punc-122 coelomocytes specific promoter (G, dzEx1321). The corresponding detector alone (H, dzEx1322) shows no signal.

I. Quantification of transgenic lines as indicated. The percentage of animals showing signal is shown by black bars (N=8-54/transgenic line).