

Figure S4 Localizations of synaptic components in RIA neuron. **(A)** The localization of UNC-101::GFP in RIA neuron. As described in Margeta et al. (2009), UNC-101::GFP was exclusively localized to the presynaptic region in wild-type animals. It

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was mislocalized to the proximal region of the process in tx-7(nj50) mutants. (B) The localization of SNB-1::VENUS in unc-11(e47);unc-104(e1265) double mutants. The fluorescence of SNB-1::VENUS was quite dim but observed in the entire process of RIA neuron. Scale bar, $5\mu m$. (C) The representative image of the localization of SNB-1::VENUS in tx-7(nj50) gqls25[rab-3p::ppk-1] mutants and the localization indices of SNB-1::VENUS in each genotype. The overexpression of ppk-1 gene did not suppress the localization defect in tx-7 mutants. Steel-Dwass multiple comparison test was performed ($n \ge 8$ animals). Scale bar, $5\mu m$. (D) RIA-specific expression of egl-8 cDNA rescued the suppression of the SNB-1-localization defect by egl-8(n488) mutation. Steel-Dwass multiple comparison test was performed ($n \ge 15$ animals).

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