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Title: CASK and FARP localize two classes of post-synaptic ACh receptors thereby promoting cholinergic transmission

Changes in neurotransmitter receptor abundance at post-synaptic elements play a pivotal role in regulating synaptic strength. For this reason, there is significant interest in identifying and characterizing the scaffolds required for receptor localization at different synapses. Here we analyze the role of two *C*. *elegans* post-synaptic scaffolding proteins (LIN-2/CASK and FRM-3/FARP) at cholinergic neuromuscular junctions. Constitutive knockouts or muscle specific inactivation of *lin-2* and *frm-3* dramatically reduced spontaneous and evoked post-synaptic currents. These synaptic defects resulted from the decreased abundance of two classes of post-synaptic ionotropic acetylcholine receptors (ACR-16/CHRNA7 and levamisole-activated AChRs). LIN-2's AChR scaffolding function is mediated by its SH3 and PDZ domains, which interact with AChRs and FRM-3/FARP, respectively. Thus, our findings show that post-synaptic LIN-2/FRM-3 complexes promote cholinergic synaptic transmission by recruiting AChRs to post-synaptic elements.