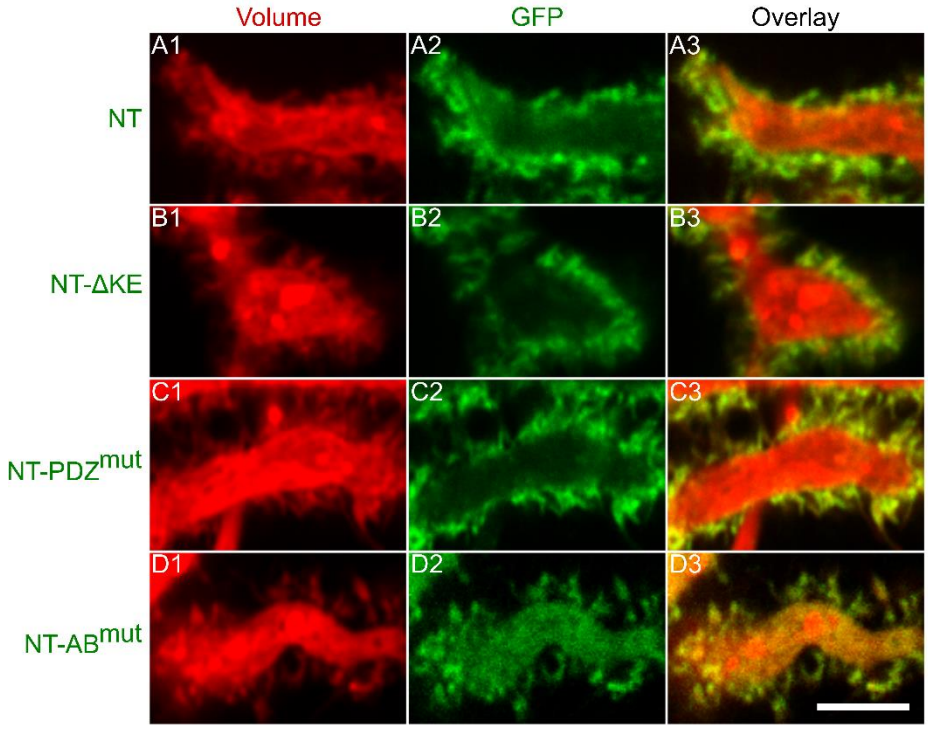

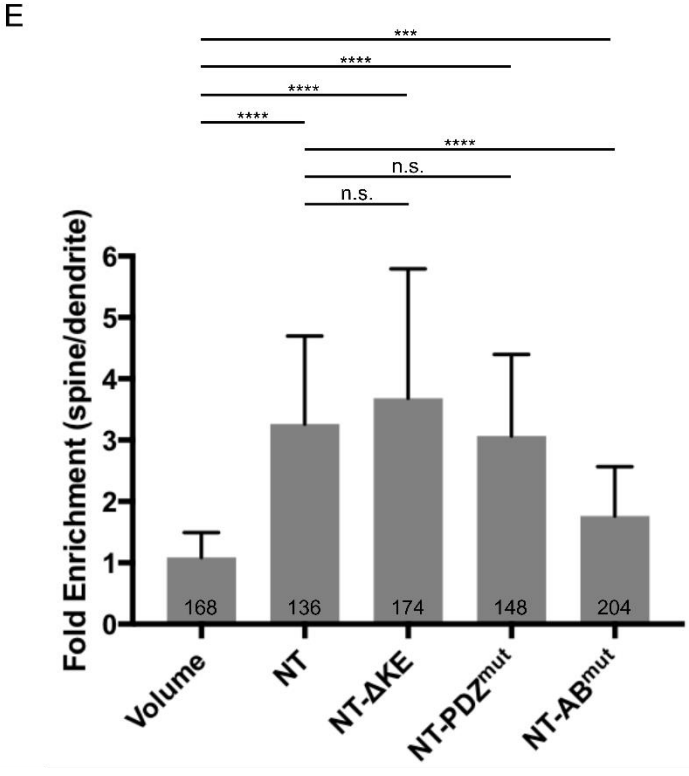

Figure S3. Myosin 18Aα's N-terminal F-actin binding site, but not its N-terminal PDZ domain or KE-rich region, contributes to spine targeting. Shown are portions of dendrites from representative cultured Purkinje neurons (DIV 18) that were expressing mCherry as a volume marker (A1-D1) and one of the following mGFP-tagged proteins: NT (the N-terminal extension of myosin 18Aα) (A2), NT-ΔKE (NT with the KE-rich region deleted) (B2), NT-PDZ^{mut} (NT with a function blocking mutation in the PDZ domain) (C2), and NT-AB^{mut} (NT with the actin binding site mutated) (D2). Panels A3-D3 show the overlaid images. (E) Shown are the fold-enrichments in the spine over the adjacent dendrite for each GFP construct, as determined by ratio imaging. The N values, which correspond to the total number of spines scored using at least 6 neurons across three independent experiments, are indicated below each measurement. Scale bar: 5 μm (D3). *** p<0.001; **** p<0.0001; n.s., not significant.