

## Figure 2 – figure supplement 1. Additional analysis of the interaction between <sup>2</sup>H,<sup>15</sup>N-labeled CpxI fragments and synaptobrevin-truncated SNARE complexes.

A. Chemical shift changes in the CpxI central helix of SNARE complex-bound <sup>2</sup>H, <sup>15</sup>N-CpxI(26-83) caused by truncation of synaptobrevin to residue 68, normalized by the changes caused by binding of <sup>2</sup>H, <sup>15</sup>N-CpxI(26-83) to the SC. The chemical shift changes were calculated as  $\Delta \delta =$  $[(\Delta \delta HN)^2 + (0.17*\Delta \delta N)^2]^{1/2}$ , where  $\Delta \delta HN$  and  $\Delta \delta N$  are the differences in HN and N chemical shifts, respectively, between the spectra being compared. For  $\Delta\delta Cpx(SC\Delta68-SC)$ , we compared <sup>1</sup>H-<sup>15</sup>N TROSY-HSQC spectra of <sup>2</sup>H, <sup>15</sup>N-CpxI(26-83) bound to SC and bound to SC∆68. For ΔδCpx(SC-free), we compared <sup>1</sup>H-<sup>15</sup>N TROSY-HSQC spectra of <sup>2</sup>H, <sup>15</sup>N-CpxI(26-83) free and bound to SC. **B.** Plot of  $\Delta\delta$ Cpx(SC $\Delta$ 68-SC) versus  $\Delta\delta$ Cpx(SC-free). **C.D.** Ratio between the intensities of cross-peaks of 1H-15N TROSY-HSQC spectra of 2H, 15N-CpxI(26-83) bound to SC $\Delta$ 68 (C) or SC $\Delta$ 62 (D) vs those observed for <sup>2</sup>H,<sup>15</sup>N-CpxI(26-83) bound to SC. To correct for small differences in protein concentrations, the cross-peaks intensities measured for each spectra were normalized with a correction factor derived by averaging the cross-peak intensities of the five C-terminal residues (residues 79-83), which were practically unaffected by the synaptobrevin C-terminal truncations. In all the plots shown in A-D, comparisons between chemical shifts or cross-peak intensities were made only for cross-peaks that could be identified in all the relevant spectra based on the assignments available for free and SNARE complexbound Cpx(26-83) (Figures 2A,B) (Pabst et al., 2000; Chen et al., 2002) and the progressive movements caused by truncations in the SNARE complex (see Figure 2C).