**SUPPLEMENTARY MATERIAL**

# Phosphorylation of Annexin A1 by TRPM7 kinase: a Switch Regulating the Induction of an α-helix.

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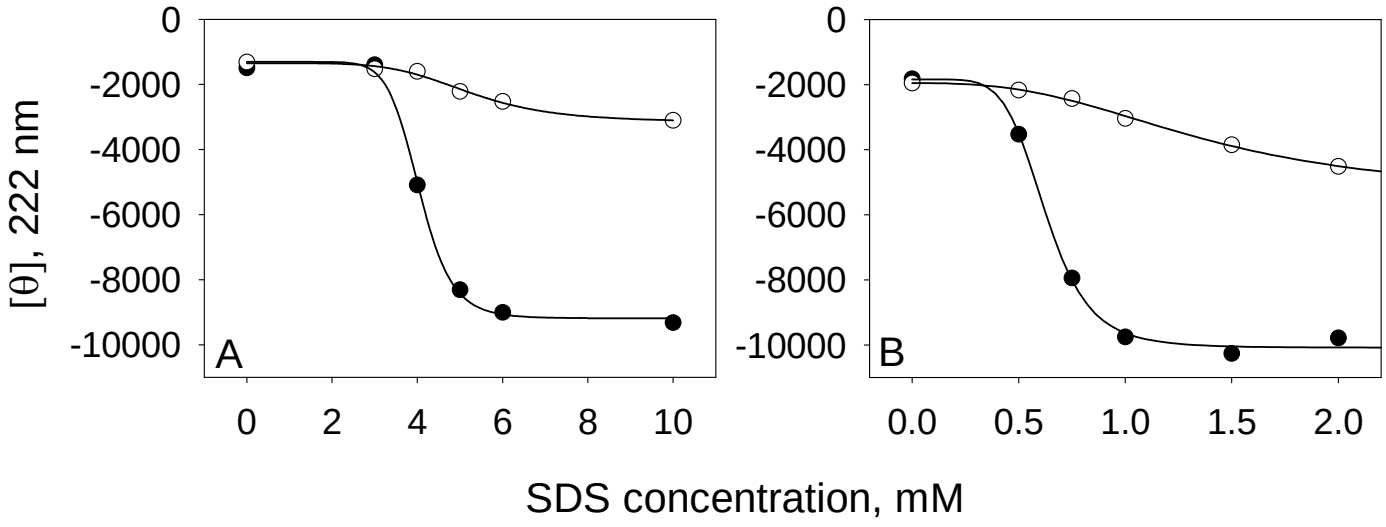
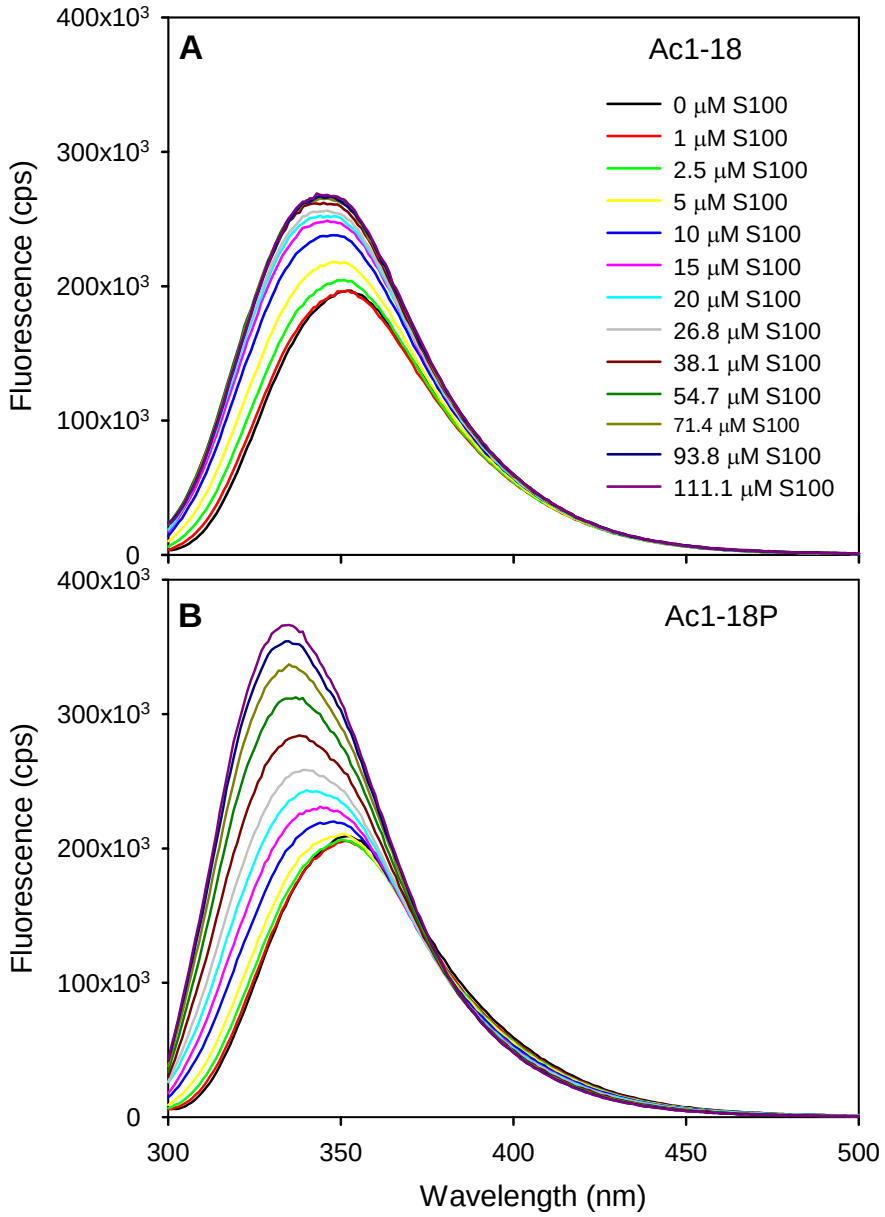



**Supplementary Figure 1. The effect of Ser5 phosphorylation on the structure of Ac1-18 peptide at different salt concentrations.** CD analysis of 10 μM Ac1-18 or 10 μM Ac1-18P peptides in the presence of different SDS concentrations at 15 mM NaCl (A) or 150 mM NaCl (B). Data presented as dependence of mean residue ellipticity at 222 nm on SDS concentration. (●) Ac1-18; (○) Ac1-18P. Note that CMC for SDS is dependent on salt concentration. The CD measurements were carried out as described in Experimental Procedures.




**Supplementary Figure 2. The effect of Ser5 phosphorylation on flurescence emission spectra of Ac1-18 peptide upon titration with S100A11 protein.** The emission spectra of 10 μM Ac1-18 (A) or 10 μM Ac1-18P (B) upon sequential addition of indicated amounts of S100A11 in the presence of 0.5 mM $Ca^{2+}$ were recorded (excitation at 295 nm). In the presence of S100A11 the emission spectra of peptide tryptophan shows a blue shift with concomitant increase of fluorescence intensity that is indicative of binding. The spectra at each concentration of S100A11 were corrected by subtraction of the spectra of S100A11 alone. The absorbance of the solutions at 295 nm did not exceed 0.1.