

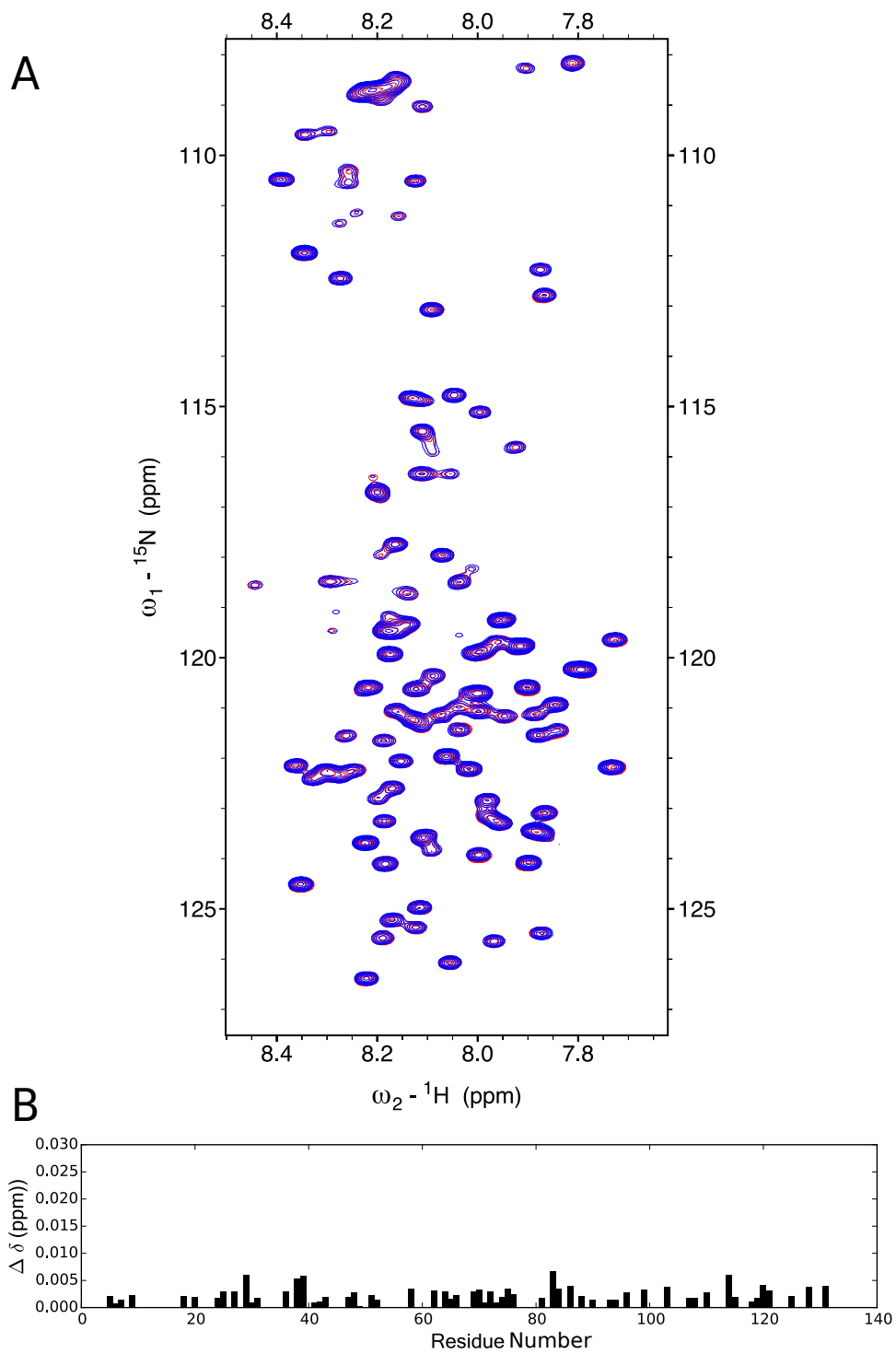
Supplementary Information

**NMR insights into the pre-amyloid ensemble and secretion targeting of the curli amyloid subunit CsgA**

Lee Sewell<sup>1</sup>, Fisentzos Stylianou<sup>1</sup>, Yingqi Xu<sup>1</sup>, Jon Taylor<sup>1</sup>, Lea Sefer<sup>1</sup>, and Steve Matthews<sup>1\*</sup>,

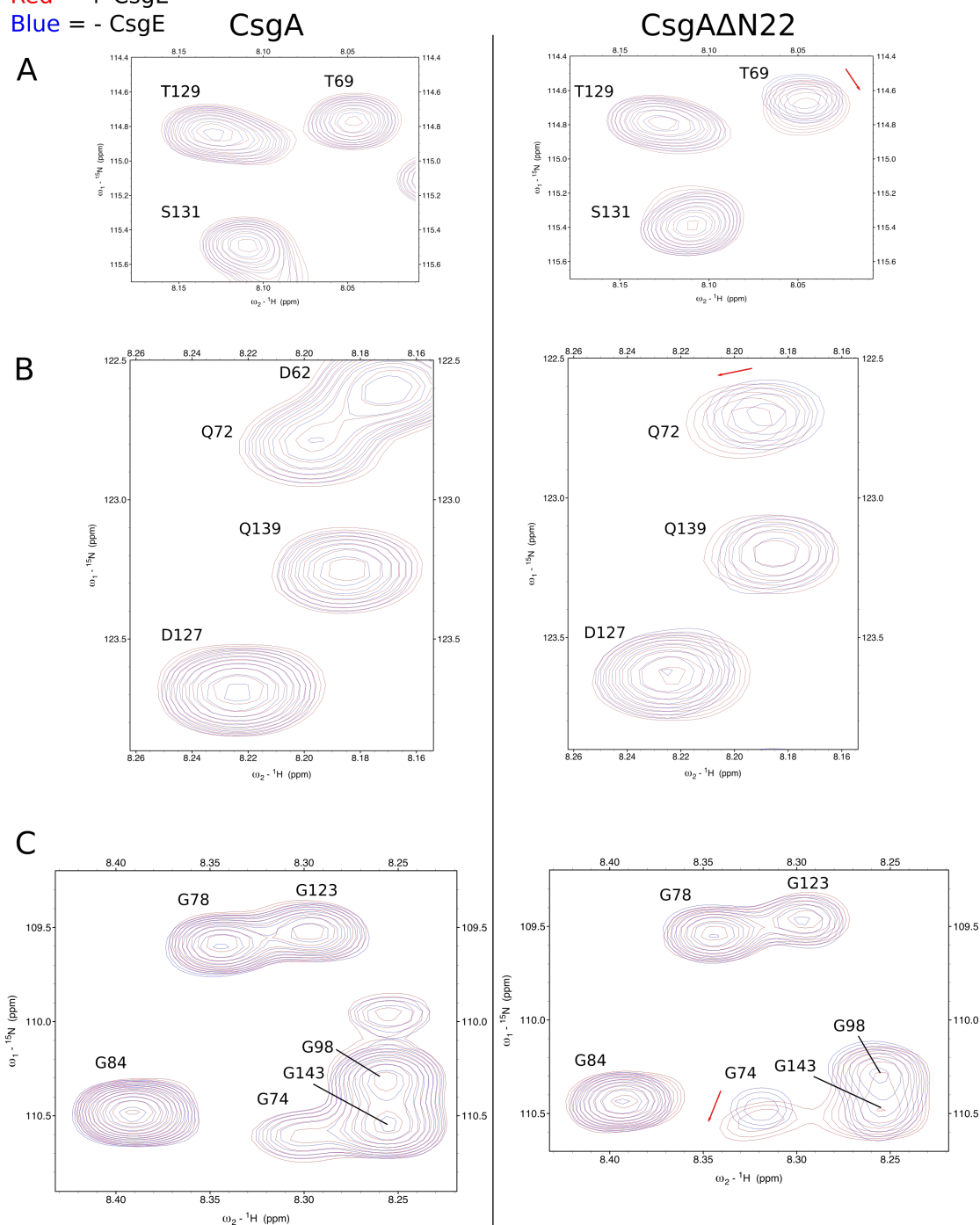
<sup>1</sup>Department of Life Sciences, Imperial College London, London, SW7 2AZ, UK

\*s.j.matthews@imperial.ac.uk

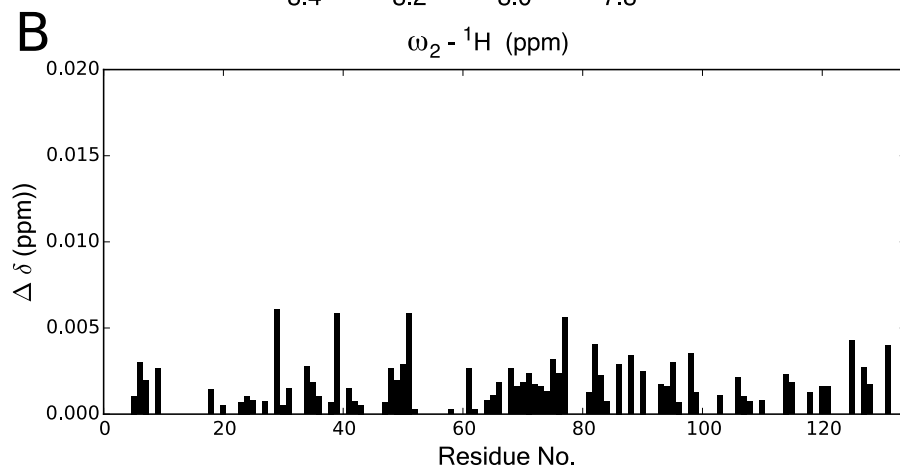
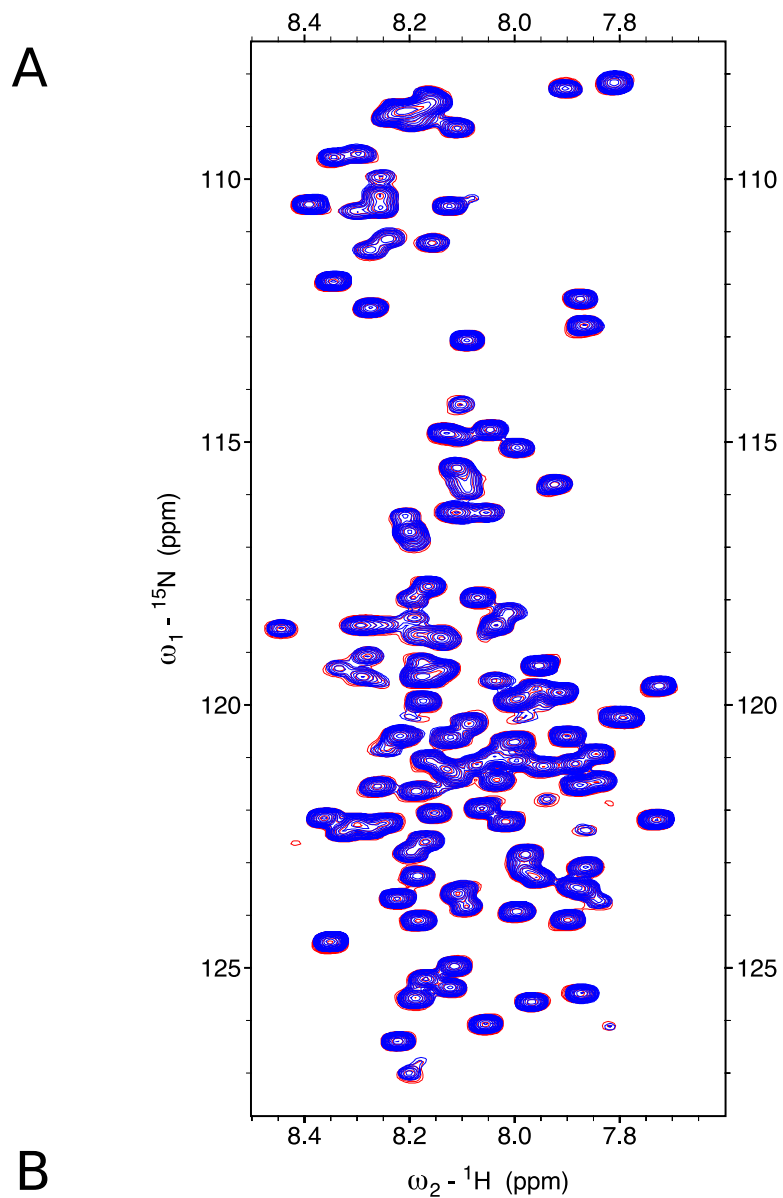


**Supplementary Figure S1 – Excess CsgC causes no significant changes in CsgA chemical shifts.**  
**(A)**  ${}^1\text{H}$ - ${}^{15}\text{N}$  HSQC NMR spectrum of 80  $\mu\text{M}$  CsgA (Blue), and with unlabelled CsgC added at concentration of 500  $\mu\text{M}$  (red). **(B)** Mapping of chemical shift perturbations caused by addition of CsgC.

Red = + CsgE  
 Blue = - CsgE



**Supplementary Figure S2 – CsgE induces significant chemical shift perturbations only in CsgA $\Delta$ N22.** Left panel displays overlay of  $^{15}\text{N}$ -labelled CsgA and unlabelled W48A/F79A CsgE  $^{15}\text{N}$ -HSQC spectra. Right panel displays overlay of  $^{15}\text{N}$ -labelled CsgA $\Delta$ N22 and unlabelled W48A/F79A CsgE  $^{15}\text{N}$ -HSQC spectra. Significant perturbations are observed in T69 (**A**), Q72 (**B**), G74 (**C**). Red contours relate to spectra including CsgE, whilst blue are in absence of CsgE. Red arrows detail the direction of chemical shift perturbation.



**Supplementary Figure S3 – Presence of CsgE does not affect chemical shifts of full length CsgA**  
**(A)**  ${}^1\text{H}$ - ${}^{15}\text{N}$  HSQC NMR spectrum of 100  $\mu\text{M}$  CsgA (Blue), and with unlabelled CsgE added at concentration of 400  $\mu\text{M}$ . **(B)** Mapping of chemical shift perturbations caused by addition of CsgE.