Supporting information for:

NMR side-chain assignments of the Crimean-Congo haemorrhagic fever virus glycoprotein n cytosolic domain

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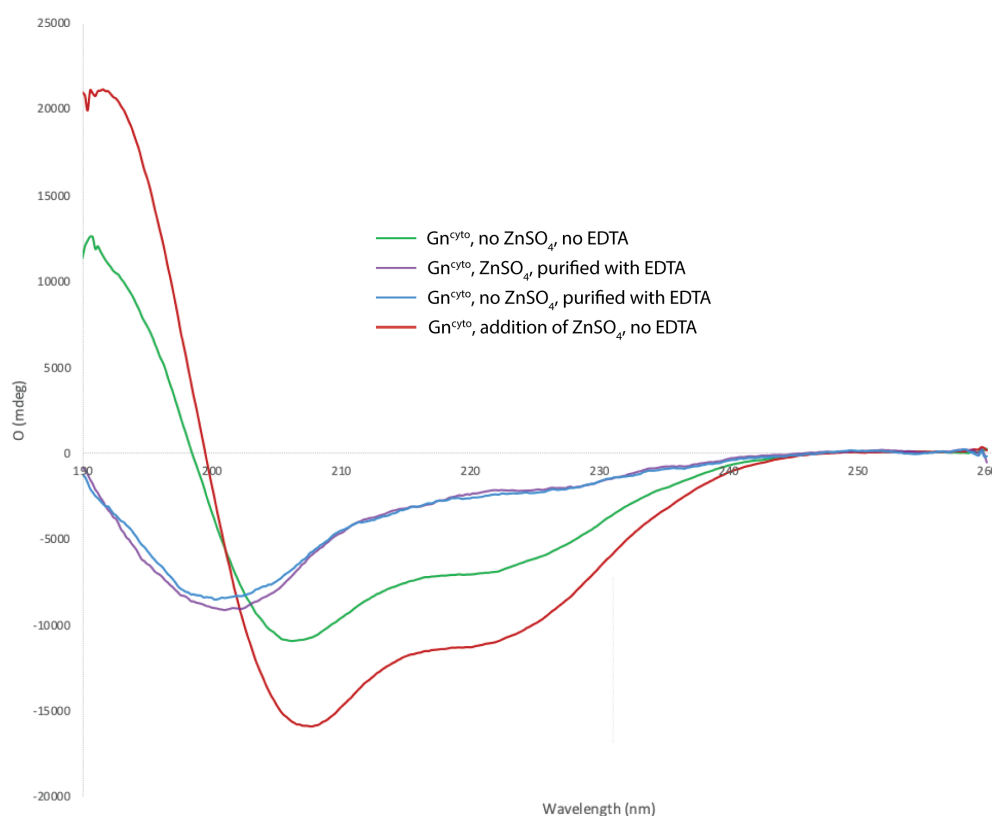
Figure S1: Circular dichroism spectra of Gn^{cyto} showing that addition of EDTA causes loss of secondary structure content due to Zn^{2+} depletion, both when synthesized in the presence (purple line) or in the absence (blue line) of $ZnSO_4$. When the protein is synthesized without addition of $ZnSO_4$, secondary structure is observed (green curve), likely by use of ions present in the extract, but the features are less pronounced than when $ZnSO_4$ is added to the cell-free reaction (red curve).
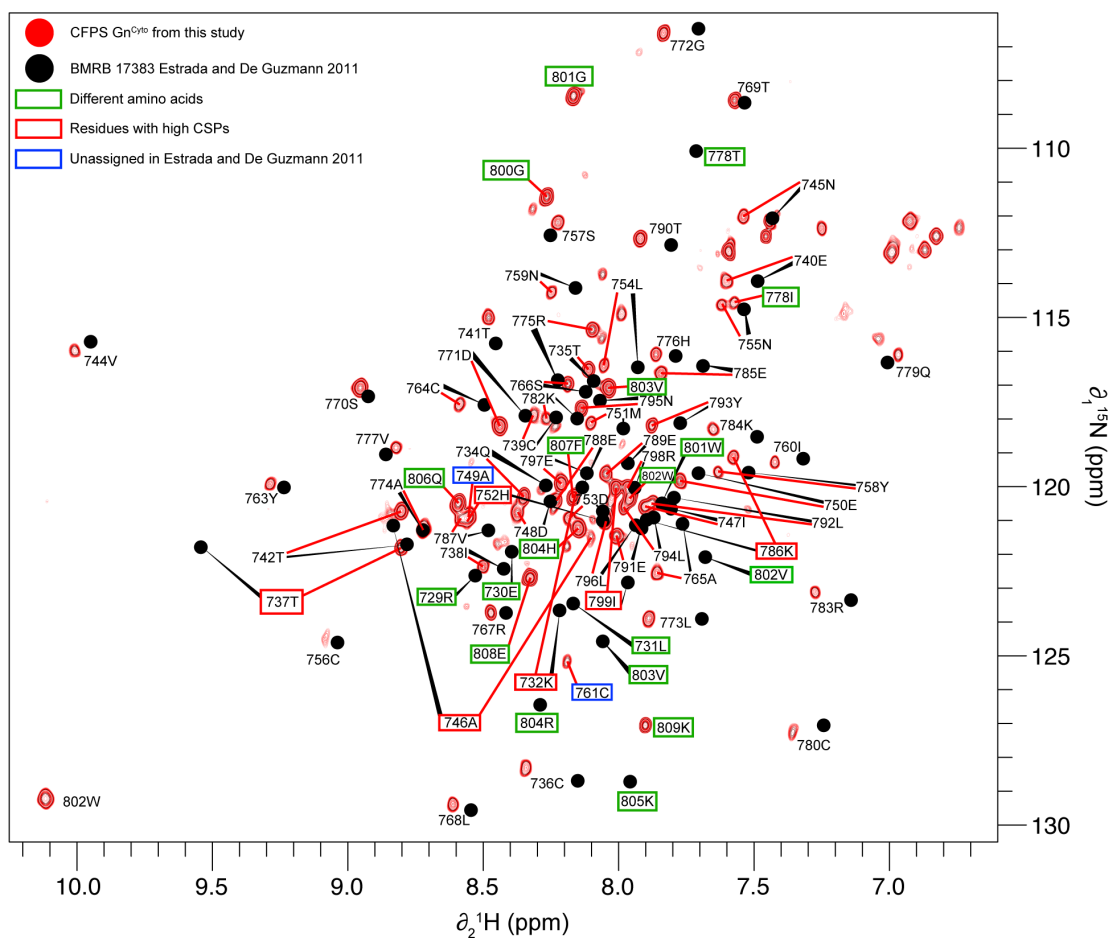
Figure S2: Comparison between the ^{15}N HSQC spectrum recorded on the CFPS Gn^{cyto} sample in red, compared to a simulation using the chemical shifts deposited in the BMRB 17383 (Estrada and De Guzman, 2011). The sequences of the analyzed proteins are shown in Figure S3.
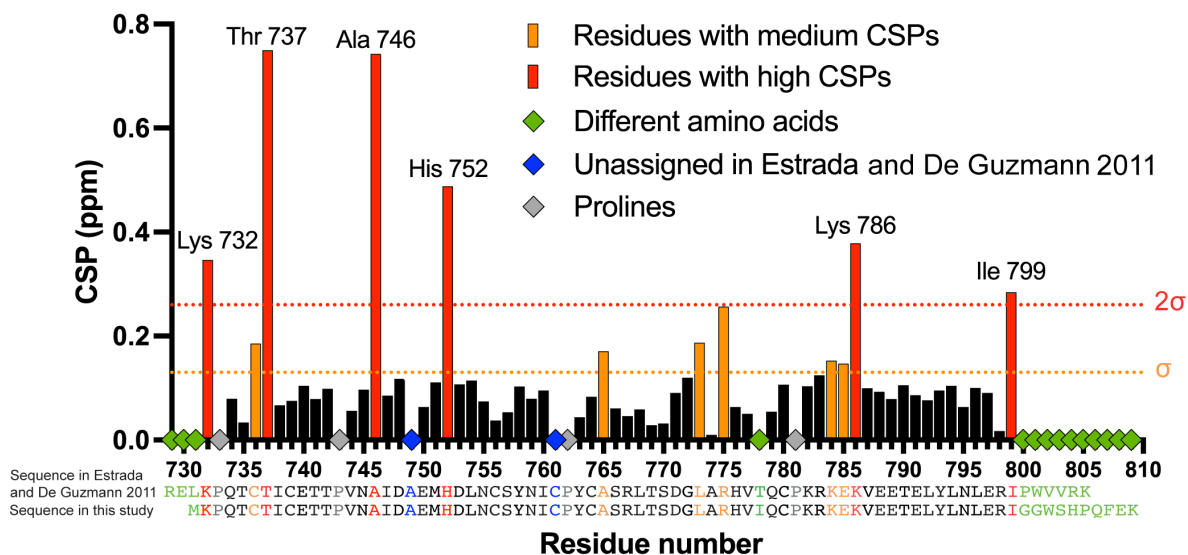
Figure S3: CSPs, calculated according to $CSP = \sqrt{(\partial^1 H_1 - \partial^1 H_2)^2 + \left(\frac{\gamma^{15N}}{\gamma^{1H}}(\partial^{15}N_1 - \partial^{15}N_2)\right)^2}$, where $\partial^1 H$ stands for the amide proton chemical shift, $\partial^{15}N$ is the amide nitrogen chemical shift, γ^{15N} is the gyromagnetic ratio of nitrogen and γ^{1H} the proton gyromagnetic ratio. Differences in the amino-acid sequence are highlighted.

References

Estrada, D. F. and De Guzman, R. N.: Structural Characterization of the Crimean-Congo Hemorrhagic Fever Virus Gn Tail Provides Insight into Virus Assembly, Journal of Biological Chemistry, 286, 21678–21686, https://doi.org/10.1074/jbc.M110.216515, 2011.