

## Supporting Information

# Synthesis of a crosslinked branched polymer network in the interior of a protein cage

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Figures S1, S2, S3, S4 and S5

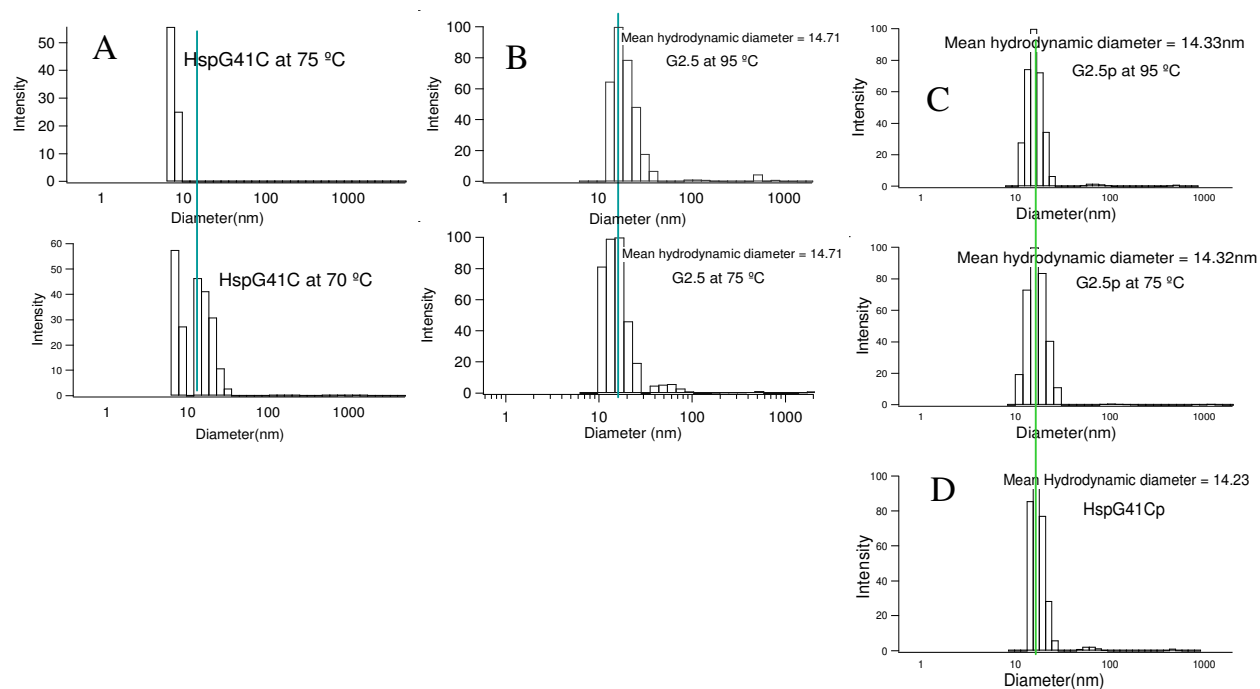


Figure S1. (A) Dynamic light scattering data of HspG41C at 70 °C and 75 °C, (B) DLS data of G 2.5 and (C) DLS data G 2.5p at temperatures 75 °C and 95 °C respectively, (D) DLS data of HspG41Cp at 25 °C

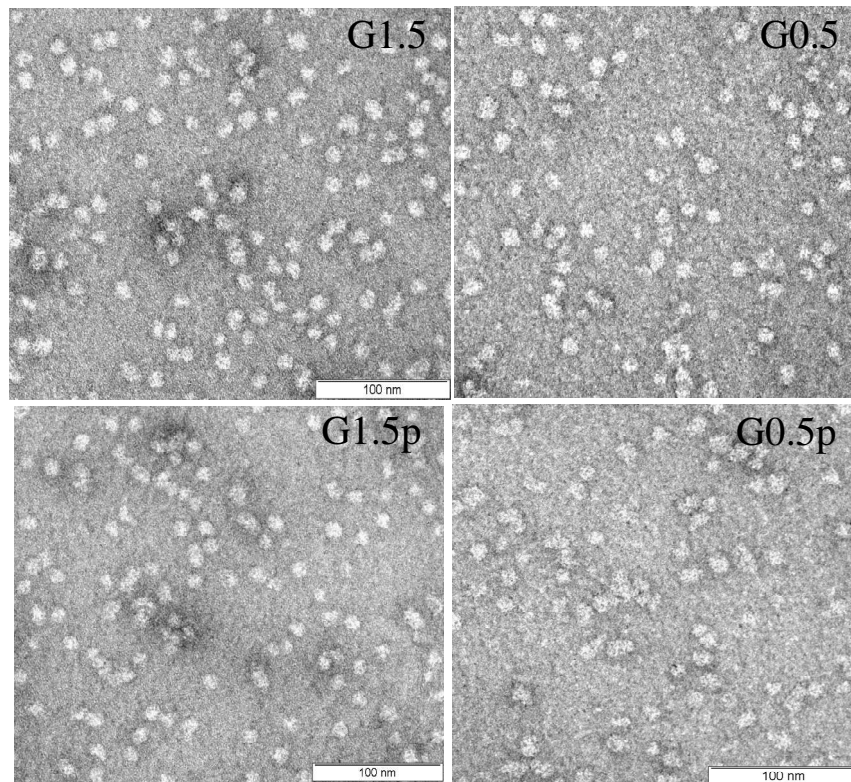


Figure S2. Transmission electron micrograph (TEM) of G 0.5( $\pm$ p) and G 1.5( $\pm$ p) generations negatively strained with 2% uranyl acetate. Scale bar is 100nm.

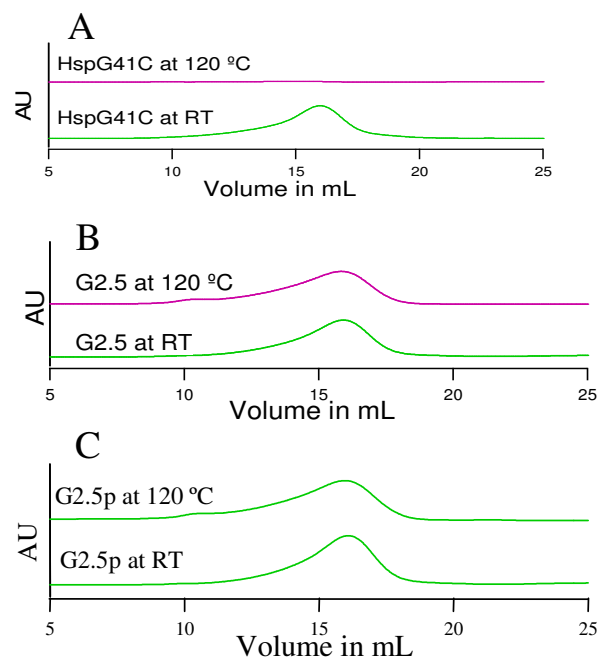


Figure S3. (A) SEC profiles of G41C at RT and 120 °C; (B) SEC profiles of G 2.5 at RT and 120 °C and (C) SEC profiles of G 2.5p at RT and 120 °C

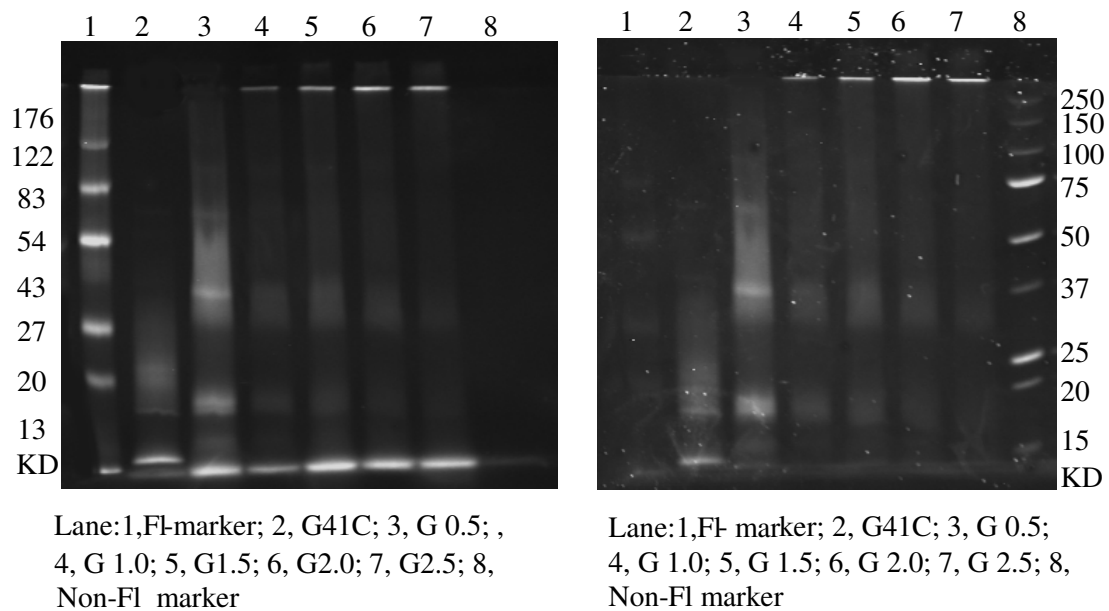


Figure S4. SDS- PAGE of cage derivatives-FTIC adducts: (left) FTIC image of Phastgel(12.5%) of G41C to G 2.5-FITC before staining with coomassie fluor<sup>TM</sup> orange protein gel stain, (right) FTIC image of Phastgel (12.5%) of G41C to G 2.5-FITC after staining with coomassie fluor<sup>TM</sup> orange protein gel stain.

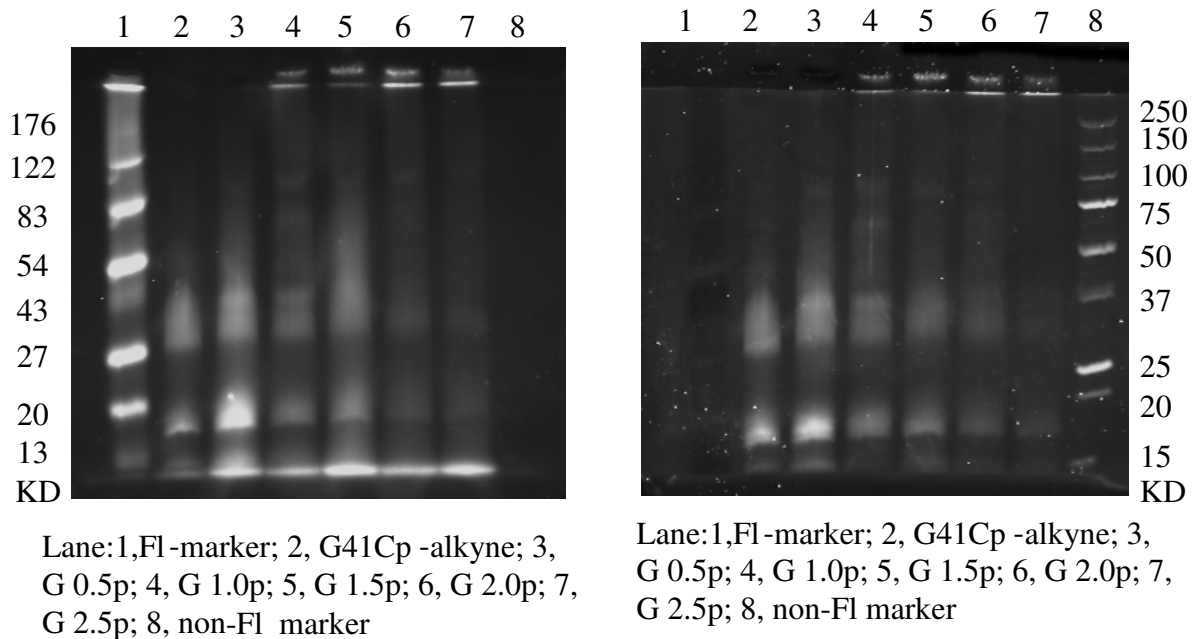


Figure S5. SDS- PAGE of cage derivatives-FITC adducts: (left) FTIC image of Phastgel(12.5%) of G41Cp to G 2.5p-FITC before staining with coomassie fluor<sup>TM</sup> orange protein gel stain (right) FTIC image of Phastgel (12.5%) of G41Cp to G 2.5p-FITC after staining with coomassie fluor<sup>TM</sup> orange protein gel stain.

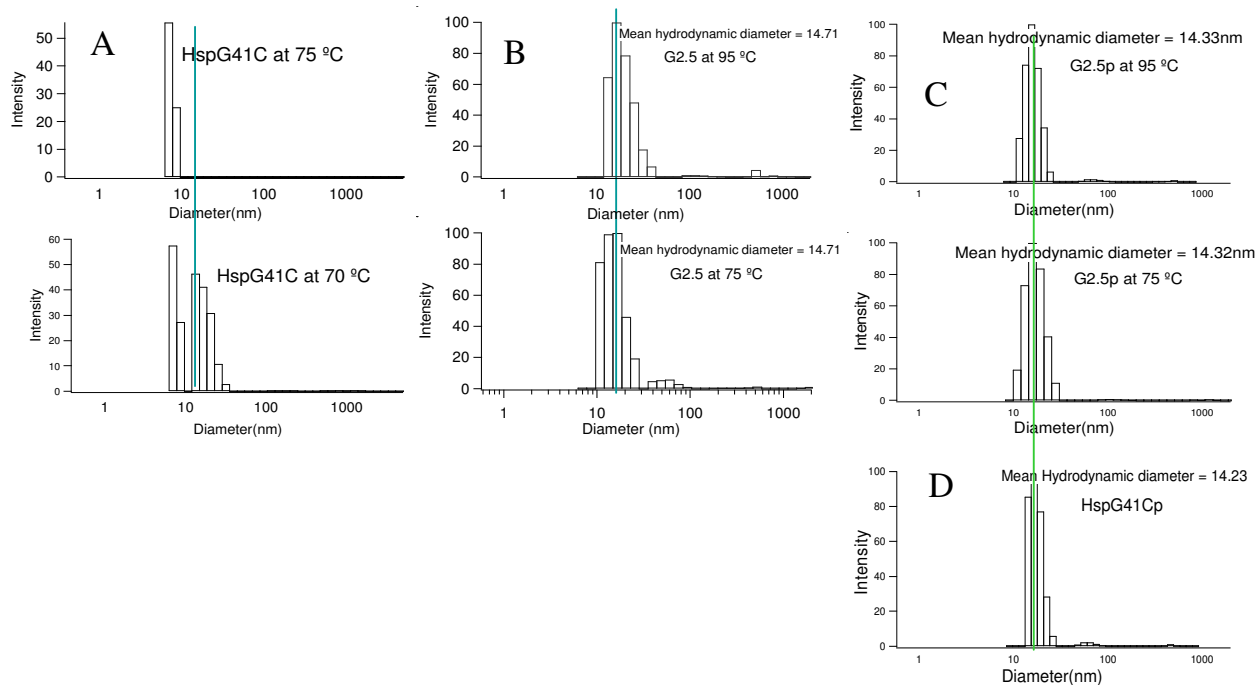


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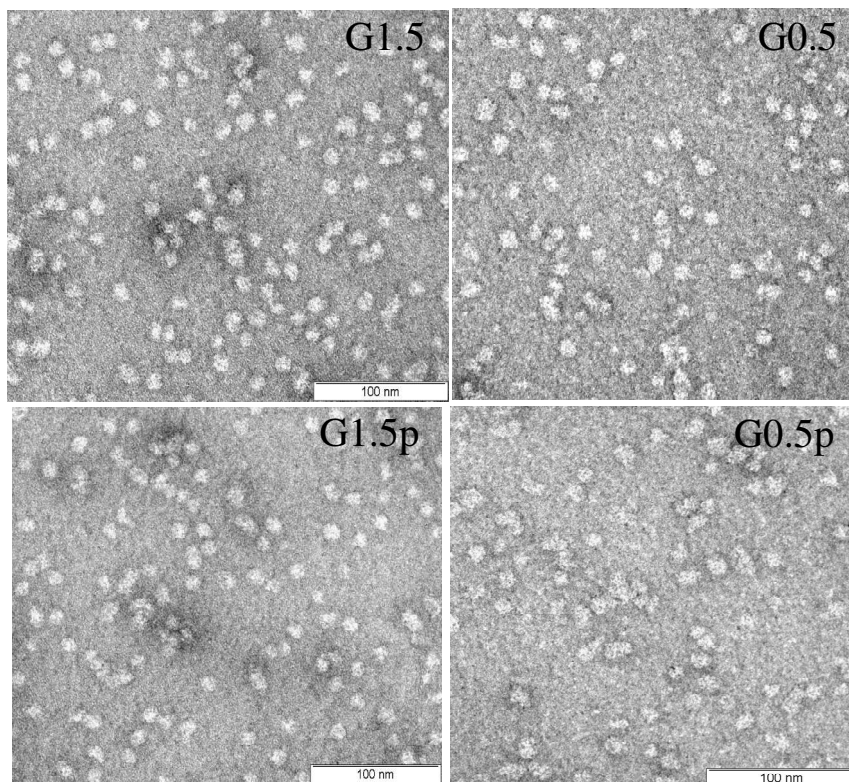


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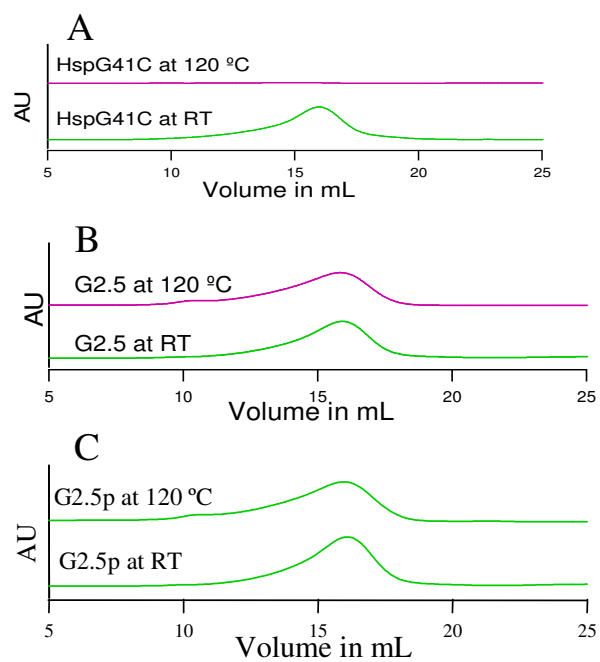


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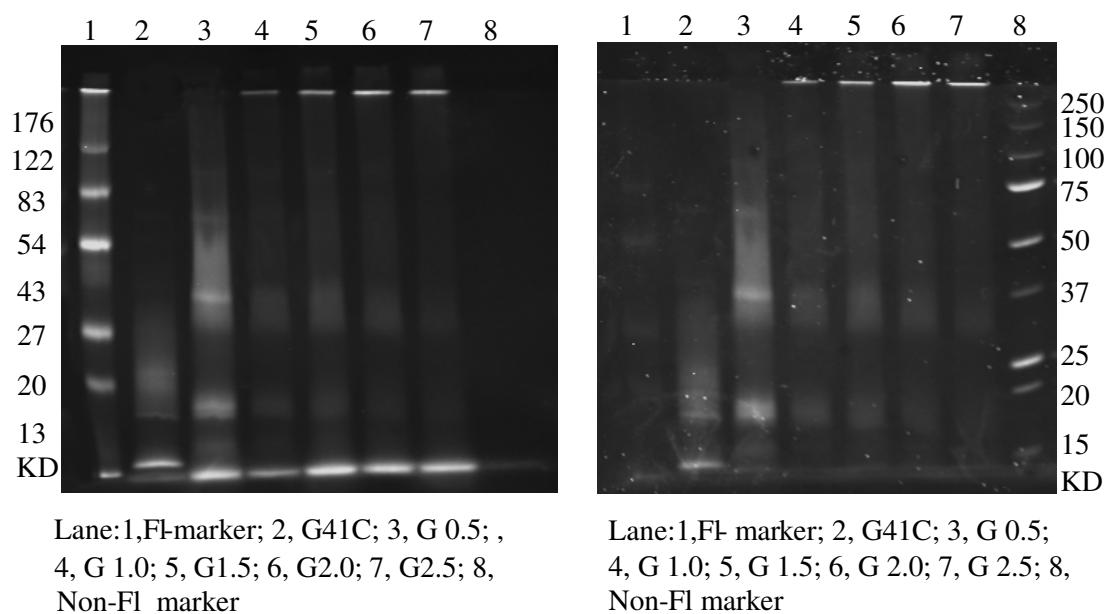


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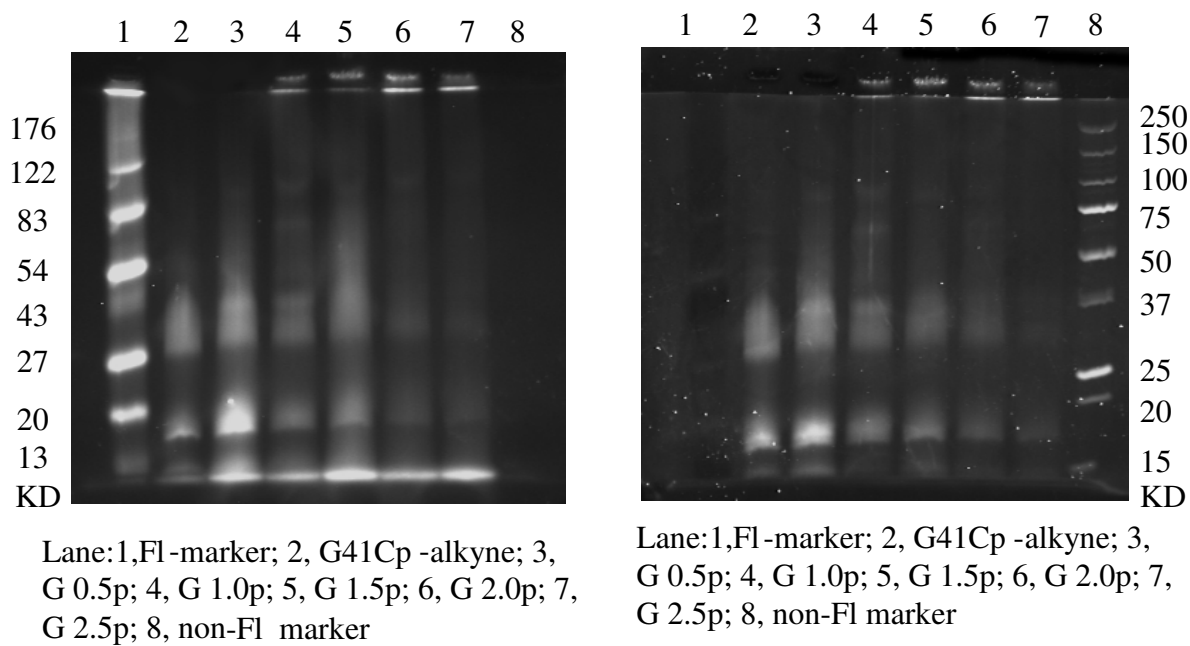


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