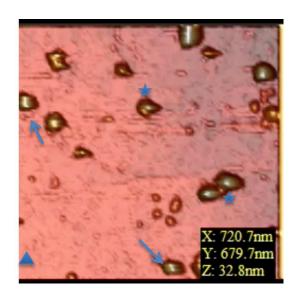
## **Supporting information**

## Protein Nanocontainers from Non-Viral Origin: Testing the Mechanics of Artificial and Natural Protein Cages by AFM

K. Heinze<sup>1</sup>, E. Sasaki<sup>2</sup>, N.P. King<sup>3</sup>, D. Baker<sup>3</sup>, D. Hilvert<sup>2</sup>, G.J.L. Wuite<sup>1\*</sup>, W.H. Roos<sup>4\*</sup>

<sup>&</sup>lt;sup>4</sup>Moleculaire Biofysica, Zernike instituut, Rijksuniversiteit Groningen, the Netherlands



Movie S1: The movie consists of consecutively recorded AFM images on AaLS-13 particles on a HOPG surface. Most of the intact cages are stably attached to the surface (stars), whereas some cages are falling apart during the course of observation (arrows). A spontaneous, new attachment can also be seen (triangle).

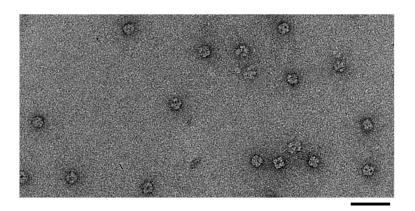


Figure S1: Negative stain EM images of O3-33 particles, scale bar 50 nm. Reprinted from ref. [13] with permission from AAAS

<sup>&</sup>lt;sup>1</sup>Natuur- en Sterrenkunde and LaserLaB, Vrije Universiteit, Amsterdam, the Netherlands

<sup>&</sup>lt;sup>2</sup>Laboratory of Organic Chemistry, ETH Zürich, Switzerland

<sup>&</sup>lt;sup>3</sup>Department of Biochemistry, University of Washington, Seattle, USA

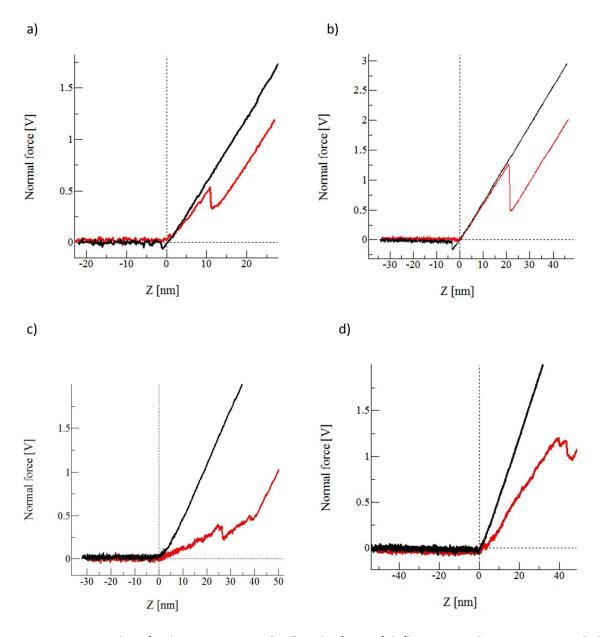


Figure S2: Examples of indentation curves (red) in the form of deflection per distance, as recorded during AFM measurements, are shown for a) O3-33, b) AaLS-wt, c) AaLS-13 and d) AaLS-13 loaded with GFP. The black curves are the respective reference curves on mica and HOPG.