



Supplementary Fig. 3. Atomic force microscopy measurements of p14-liposomes. Standard liposomes lacking p14 (curve a), p14-liposomes (curve b), or purified p14 (curve c) were adsorbed onto mica surfaces, and force measurements were recorded by atomic force microscopy. The individual retraction force curves are shown as a function of force (in pN) over distance. The displacement force equivalent to 100 pN is indicated. Scanning the surface of normal liposomes detected a weak adhesion interaction, where the tip was dragged below the neutral position until the link between tip and surface was suddenly broken and the tip returned to the neutral position (curve a). Similar examination of p14-liposomes revealed a more pronounced adhesion signature (curve b), the saw-toothed nature of which is characteristic of force spectra for proteins. A similar saw tooth-shaped force curve was evident when force spectra were recorded from p14 protein layers deposited on mica surfaces (curve c), suggesting that p14 has adhesive properties.