Supporting Material

Synthetic Lipid Vesicles Recruit Native-Like Aggregates and Affect the Aggregation Process of the Prion Ure2p; Insights On Vesicle Permeabilization and Charge Selectivity

Laura Pieri, Monica Bucciantini, Patrizio Guasti, Jimmy Savistchenko, Ronald Melki and Massimo Stefani
Supplementary Fig 1. Concentration dependent extent of calcium influx into PS vesicles incubated with native-like and amyloid Ure2p fibrils. Ure2p native and amyloid fibrils, were added to a suspension of vesicles loaded with 0.1 mM Fura-2 at 0, 10 and 20 μM final protein concentration, in the presence of 1.0 mM CaCl₂. Then the lipid-protein mixtures were incubated directly in the cuvette and the increase of Fura-2 fluorescence ratio F340/F380 due to Ca²⁺ influx into the vesicles was monitored over time for 25 min. A 3 to 4 fold increase in Ca²⁺ influx is measured upon comparing the permeabilities recorded using amyloid and native Ure2p fibrils.
Supplementary Fig 2. Calcium influx into PS vesicles incubated with native-like Ure2p fibrils in the absence (black squares) and the presence of tromethamine, 10mM (red squares). Ure2p native fibrils (10 μM), were added to a suspension of vesicles loaded with 0.1 mM Fura-2 in the presence of 1.0 mM CaCl₂ in the absence or the presence of tromethamine (10 mM). Then the lipid-protein mixtures were incubated directly in the cuvette and the increase of Fura-2 fluorescence ratio F340/F380 due to Ca²⁺ influx into the vesicles was monitored over time for 15 min.