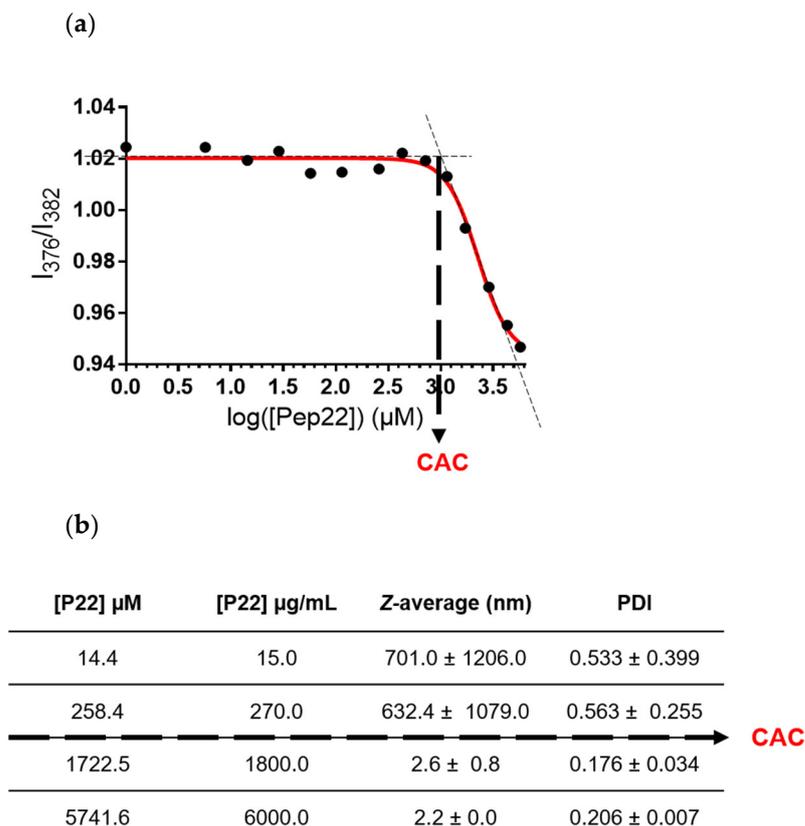
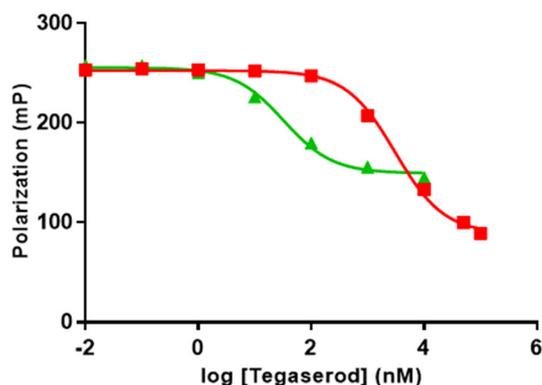


# Supplementary Materials: Active Targeted Nanoemulsions for Repurposing of Tegaserod in Alzheimer's Disease Treatment

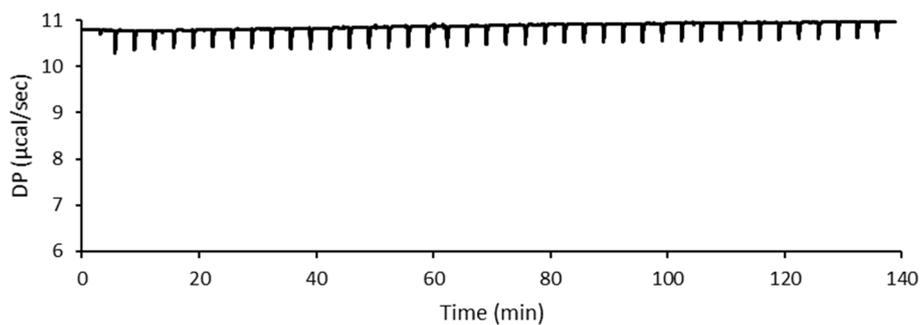
Line Séguy, Léna Guyon, Manon Maurel, Pascal Verdié, Audrey Davis, Sophie Corvaisier, Vincent Lisowski, Patrick Dallemagne, Anne-Claire Groo and Aurélie Malzert-Fréon



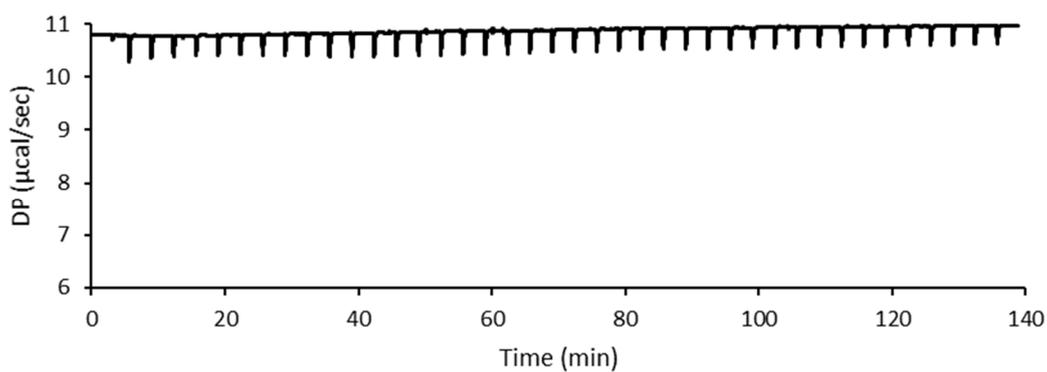
**Figure S1.** Self-assembling properties of P22 suspension in 60 mM phosphate buffer. **(a)** Boltzmann-type sigmoid obtained by the pyrene fluorescence 1:3 ratio method showing the CAC value, corresponding to the first sharp decrease. **(b)** Features of P22 suspensions at different concentrations obtained by DLS. PDI is the particle size polydispersity index. Measurements are expressed as the average ± the standard deviation.



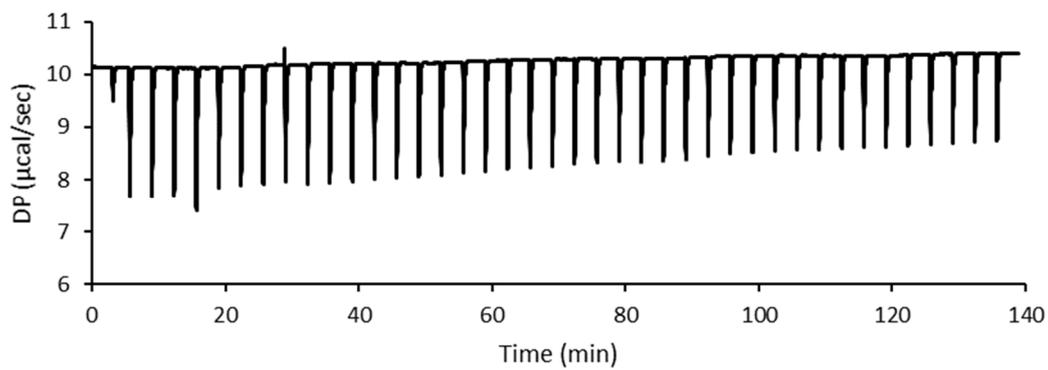
**Figure S2.** hERG channel inhibition profile of tegaserod (in red) and E-4031 as reference (in green).



(a)

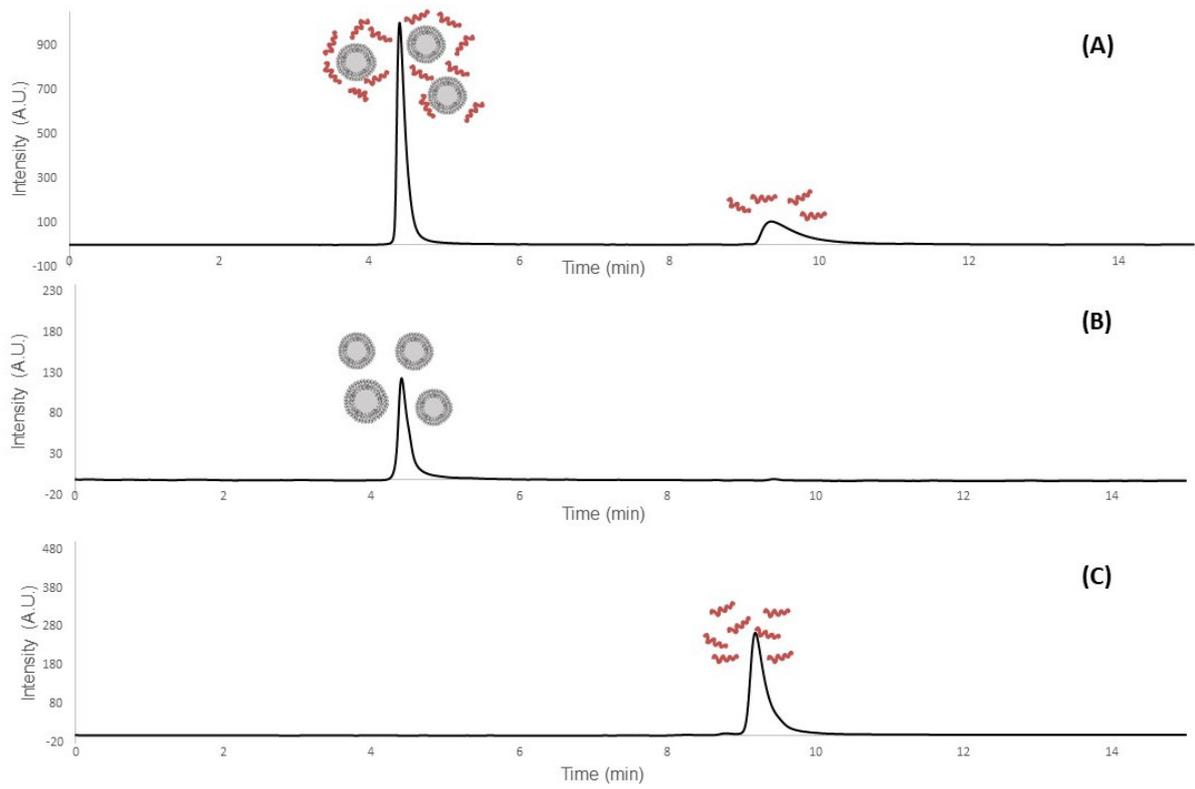


(b)



(c)

**Figure S3.** Isothermal titration calorimetry data obtained for the binding interaction in 60 mM phosphate buffer at 25 °C of P22 (37.3 mM) to Tg-NES (200 mM). **(a)** Shows the heat peptide dilution: injection of 0.9  $\mu\text{L}$  aliquots of P22 solution in 60 mM phosphate buffer. **(b)** Shows exothermic heat releases upon injection of 0.9  $\mu\text{L}$  aliquots of P22 solution in Tg-NES. **(c)** Shows integrated heat data, giving a differential binding curve.



**Figure S4.** Characterization of P22 adsorption on Tg-NEs using SEC coupled with UPLC. Chromatograms of (A) Tg-NEs/P22 mixture ([P22] = 600  $\mu\text{g}/\text{mL}$ , [lipid] = 20 mM) after 3 hours of incubation, (B) Tg-NEs ([lipid] = 2 mM) and (C) P22 ([P22] = 200  $\mu\text{g}/\text{mL}$ ).