

Wessels, Williard, Scimeca and Weninger, “Rapid membrane fusion of individual virus particles with supported lipid bilayers”

SUPPLEMENTAL MOVIE LEGENDS

Movie 1: Movie used to generate figure 3a and 3b showing the fusion of an individual Sindbis virus particle to a supported lipid bilayer (liver extract). The 8-second video from a 13 μm by 13 μm area shows binding, membrane fusion and R18 dye molecules diffusing in the bilayer away from the fusion site.

Movie 2: Multiple fusions. A single Sindbis virus spot exhibits three dequenching events separated by several seconds. The diffusion of dye away from the dequenching location confirms independent lipid mixing events. Some fluorescence remains even after the final fusion event. We speculate that this rare phenomenon arises from aggregates of multiple virus particles. The movie shows a 25 μm by 25 μm area from a supported lipid bilayer (liver extract) at pH 4.2.