SUPPLEMENTARY INFORMATION

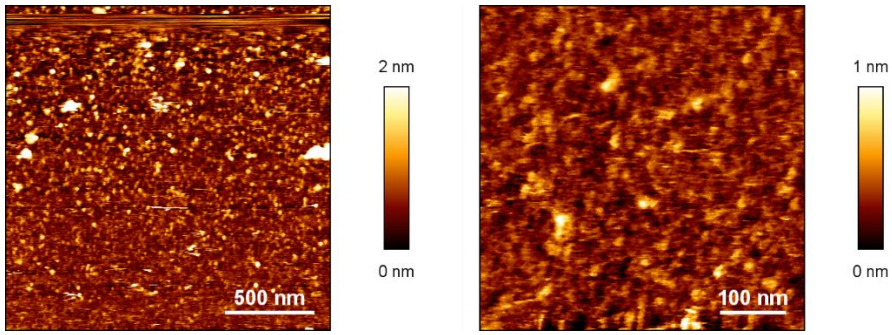

Figure S1. At 1:50 CFSV p7:lipid ratios, some areas of the SLB showed nanometric protrusions hypothesized to be lipid-protein aggregates.

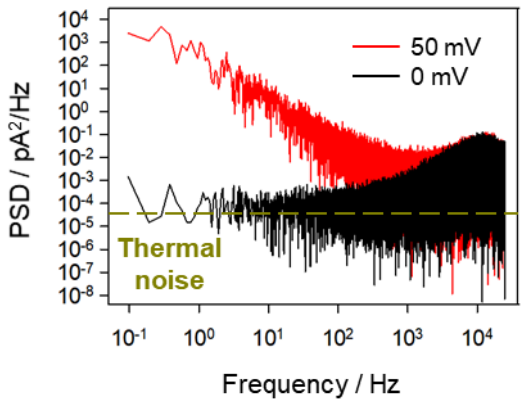

Figure S2. Power spectral density of the whole current trace shown in Fig1B (red spectrum). Thermal noise (dark yellow dashed line) calculated as $4kTG$ using channel conductance of Fig. 1B (G ~ 2 nS). Background noise (black spectrum) obtained at the same conditions as Fig1B with V = 0 mV.

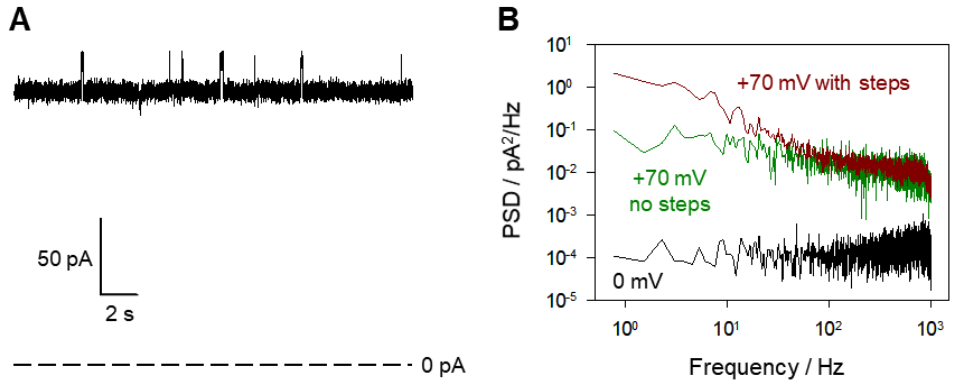

Figure S3. Fluctuations between levels increase the slope of PSD at low frequencies. (**A**) Example of current trace of CSFV p7 in ER-like membranes at pH 5 and 150 mM KCl showing flickering between two defined levels. (**B**) PSD of the current trace of panel A including current steps (brown) and excluding them (green).

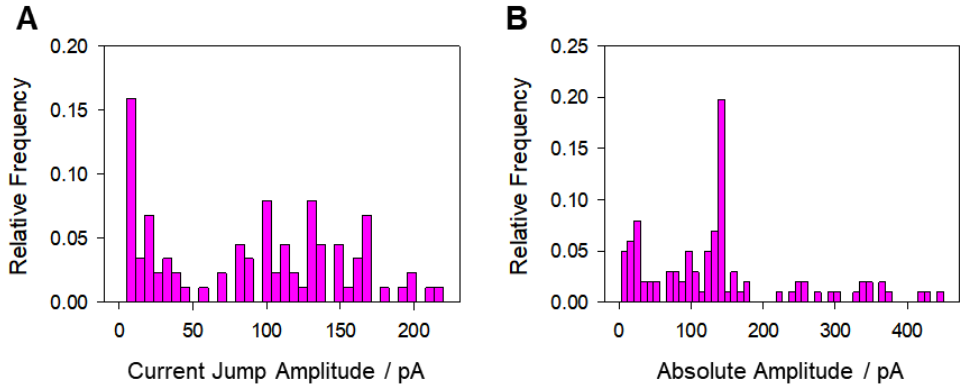

Figure S4. A) Histograms of the conductance increments (ΔG) (101 events) and B) Absolute conductance levels (G) (120) of CSFV p7 in DOPS membranes in 150 mM KC and pH = 5.0.

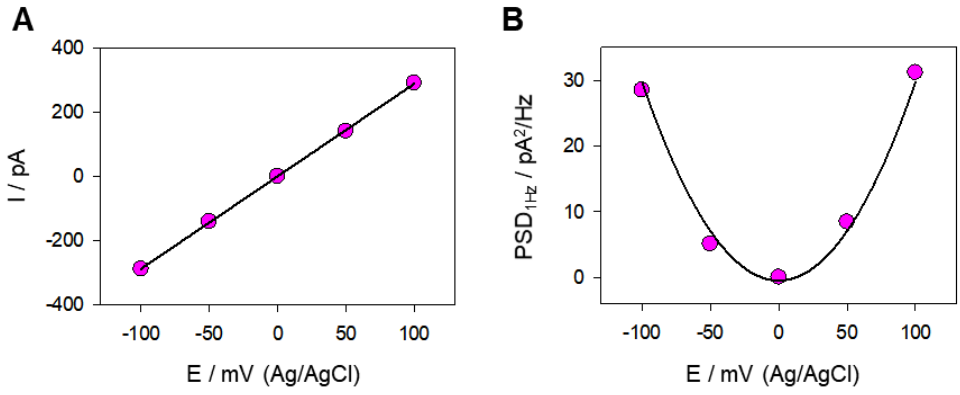

Figure S5. (Left) Current-voltage curves obtained after a stable current trace of p7 in a DOPS membrane at pH 5.0 and 150 mM KCl (Right) Corresponding PSD at 1 Hz obtained from (A), as a function of voltage. Solid line represents a parabolic fitting.

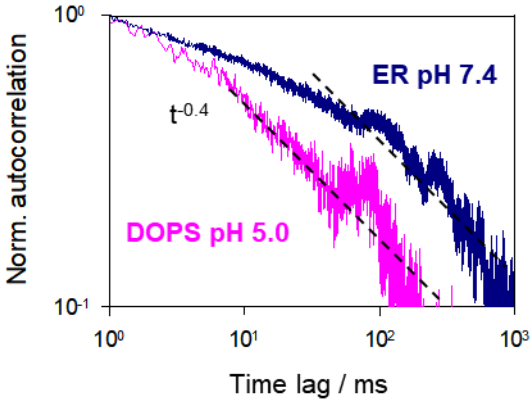

Figure S6. Normalized autocorrelation function of current of CSFV p7 pores in DOPS membranes at pH 5.0 and ER-membranes at pH 7.4