

Figure S1. Experimental (markers) and approximating (dotted lines) dependences of conductivity increment on cyt c concentration at different pH.

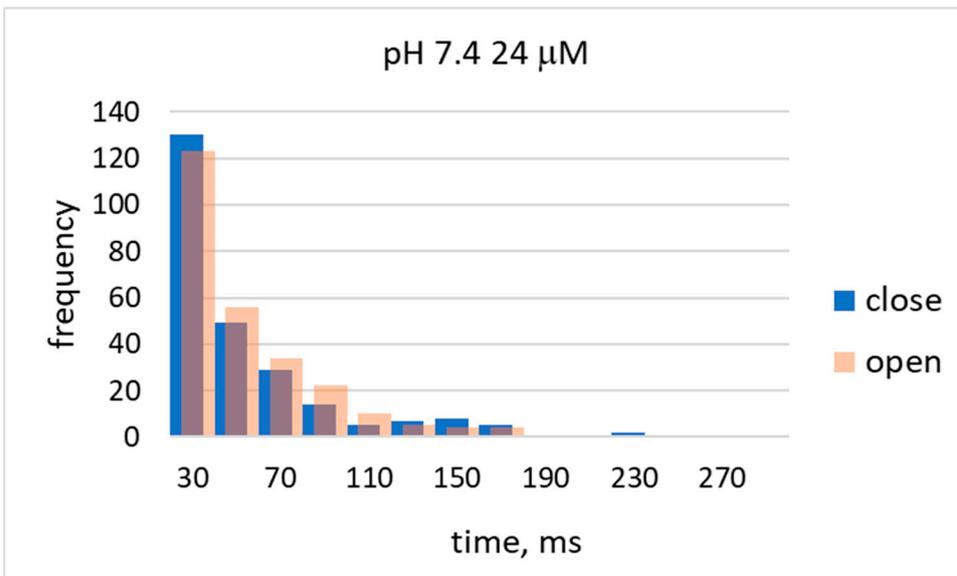


Figure S2. Distributions of the durations of the open and closed states of pore presented in Figure 3c. Voltage +50 mV, 0.1 M KCl, pH=7.4, 24 μM cyt C.

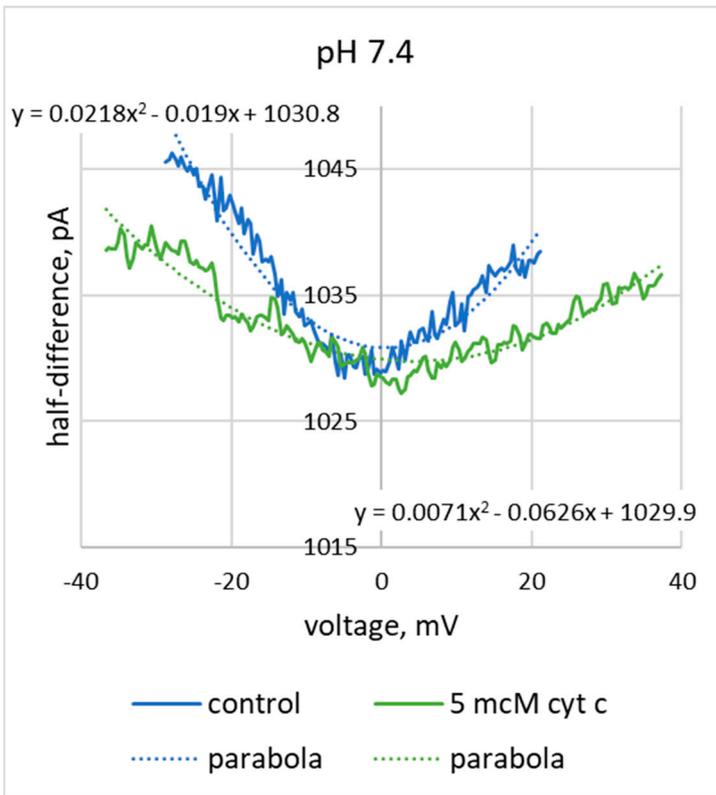


Figure S3. The half-difference of membrane currents in control and after one-side addition of 5 μM cyt c. Parameters of the triangular voltage are 100 mV and 1 Hz. 0.1 M KCl, pH=7.4. The calculated minimum is shifted from 0.4 (control) to 4.4 mV.

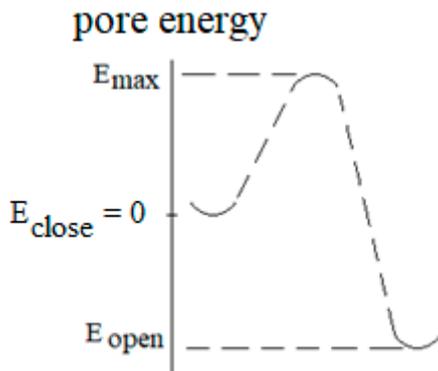


Figure S4. Energy diagram for the long-lived pore $E_{open} < E_{close} = 0$

To estimate E_{max} we can use the literature on value ν . The scatter of ν value is significant – from $5 \times 10^{32} \text{ s}^{-1} \text{ m}^{-3}$ [1] to $2 \times 10^{42} \text{ s}^{-1} \text{ m}^{-3}$ [2]. In [3] we have got for ν $5.6 \times 10^{33} \text{ s}^{-1} \text{ m}^{-3}$.

According to [2], $V_{pore} = V \approx 2\pi r^2 h$ is the volume of the membrane portion immediately connected with a pore, $r = 0.4 \text{ nm}$ is the pore radius, $h = 5 \text{ nm}$ is the membrane thickness.

E_{max} values at different ν are presented in the table:

Table S1. Energy barrier between the open and close states of a pore

$\nu, \text{s}^{-1} \text{ m}^{-3}$	$\Theta=0.4 \text{ s}, E_{max}, kT$	$\Theta=0.06 \text{ s}, E_{max}, kT$	reference
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5×10^{32}	13.8	11.9	[1]
5.6×10^{33}	16.2	14.3	[3]
2×10^{42}	35.9	34.0	[2]

1. Powell, K. T., Derrick, E. G., & Weaver, J. C. (1986). A quantitative theory of reversible electrical breakdown in bilayer membranes. *Bioelectrochemistry and Bioenergetics*, 15(2), 243-255. [https://doi.org/10.1016/0302-4598\(86\)80031-9](https://doi.org/10.1016/0302-4598(86)80031-9)
2. Freeman, S. A., Wang, M. A., & Weaver, J. C. (1994). Theory of electroporation of planar bilayer membranes: predictions of the aqueous area, change in capacitance, and pore-pore separation. *Biophysical journal*, 67(1), 42-56.
3. Anosov, A. A., Smirnova, E. Y., Ryleeva, E. D., Gligonov, I. A., Korepanova, E. A., & Sharakshane, A. A. (2020). Estimation of the parameters of the Smoluchowski equation describing the occurrence of pores in a bilayer lipid membrane under soft poration. *The European Physical Journal E*, 43(10), 1-9.