## SUPPLEMENTARY INFORMATION FOR

What controls open-pore and residual currents in the first sensing zone of alpha-hemolysin nanopore? Combined experimental and theoretical study

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Figure S1. Calculated vs. Measured open pore current. The error-bars for BD data did not exceed 5 %.



**Figure S2.** The computed vs. measured currents in all studied systems for 3' and 5' entrance. The error bars are not shown for BD simulations (within 2 % of the computed average values).



**Figure S3.** 1D multi-ion average PMF averaged from ten micro-second simulations per system for open (A) and block pores (B). The results are shown for the K<sup>+</sup> ions only.