

Description of Additional Supplementary Files

Supplementary Movie 1. GLIC undergoing overall conformational changes from the resting-like state (purple) to the open state (deep pink). The ECD and TMD of GLIC are labeled. In the ECD, a compaction arises first, which is sequentially followed by the counter-clockwise rotation toward open state.

Supplementary Movie 2. Conformational changes in TMD of GLIC from the resting-like state (purple) to the open state (pink). The extracellular side of TMD is displayed, with the M2 helices labeled. During activation, M2-M3 loop moves outward followed by counter-clockwise rotation of M2 helices resulting in channel opening.

Supplementary Movie 3. The cascade of conformational changes from the resting-like state to the open state highlighting important regions. The overall structure of GLIC_{pH7.5} is depicted. Only two diagonal subunits are shown for clarity. The conformational changes in the Loop A, β 1- β 2 loop, and Loop F are shown in succession, with the pH 5.5 model, C1, C2 and O superimposed onto the pH 7.5 model. Finally, a top view of the TMD highlights the conformational change of M2–M3 loop and M2 helix in all five structures.