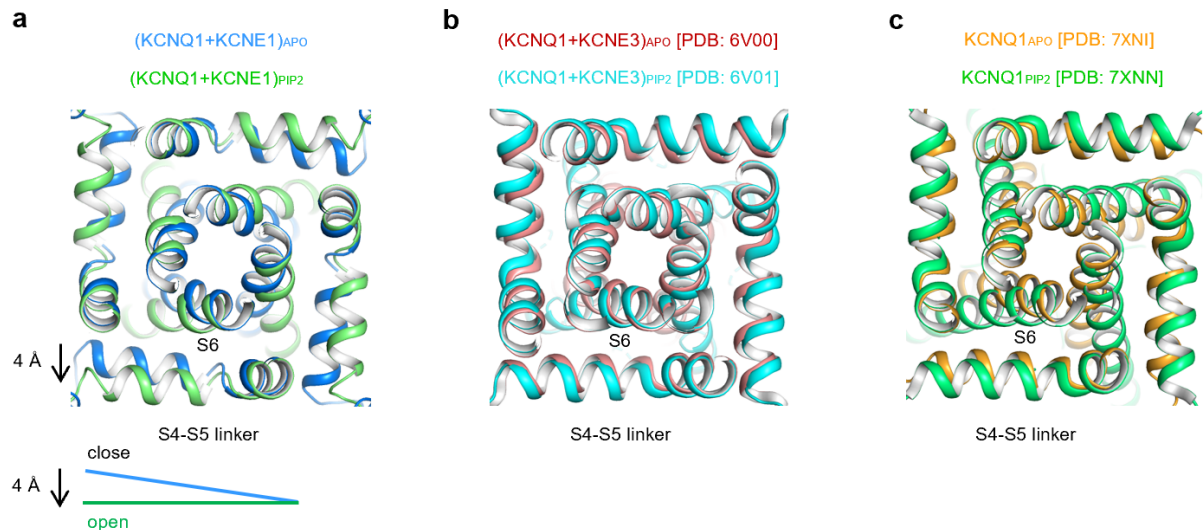




Supplementary information, Fig. S14 KCNQ1+KCNE1 shows different S4-S5 linker motion during channel opening from KCNQ1 and KCNQ1+KCNE3 channels. (a) Structural comparison of the activation gate (S4-S5 linker and S6) between (KCNQ1+KCNE1)_{apo} and (KCNQ1+KCNE1)_{PIP2}. The S4-S5 linker shows 4 Å horizontal expansion during the channel opening. (b) Structural comparison of the activation gate between (KCNQ1+KCNE3)_{apo} (PDB: 6V00¹) and (KCNQ1+KCNE3)_{PIP2} (PDB: 6V01¹). The S4-S5 linker shows minimum horizontal expansion during the channel opening. (c) Structural comparison of the activation gate between KCNQ1_{apo} (PDB: 7XNI²) and KCNQ1_{PIP2} (PDB: 7XNN²). The S4-S5 linker shows <1 Å horizontal expansion during the channel opening.

References

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