

Supplementary information, Figure S6

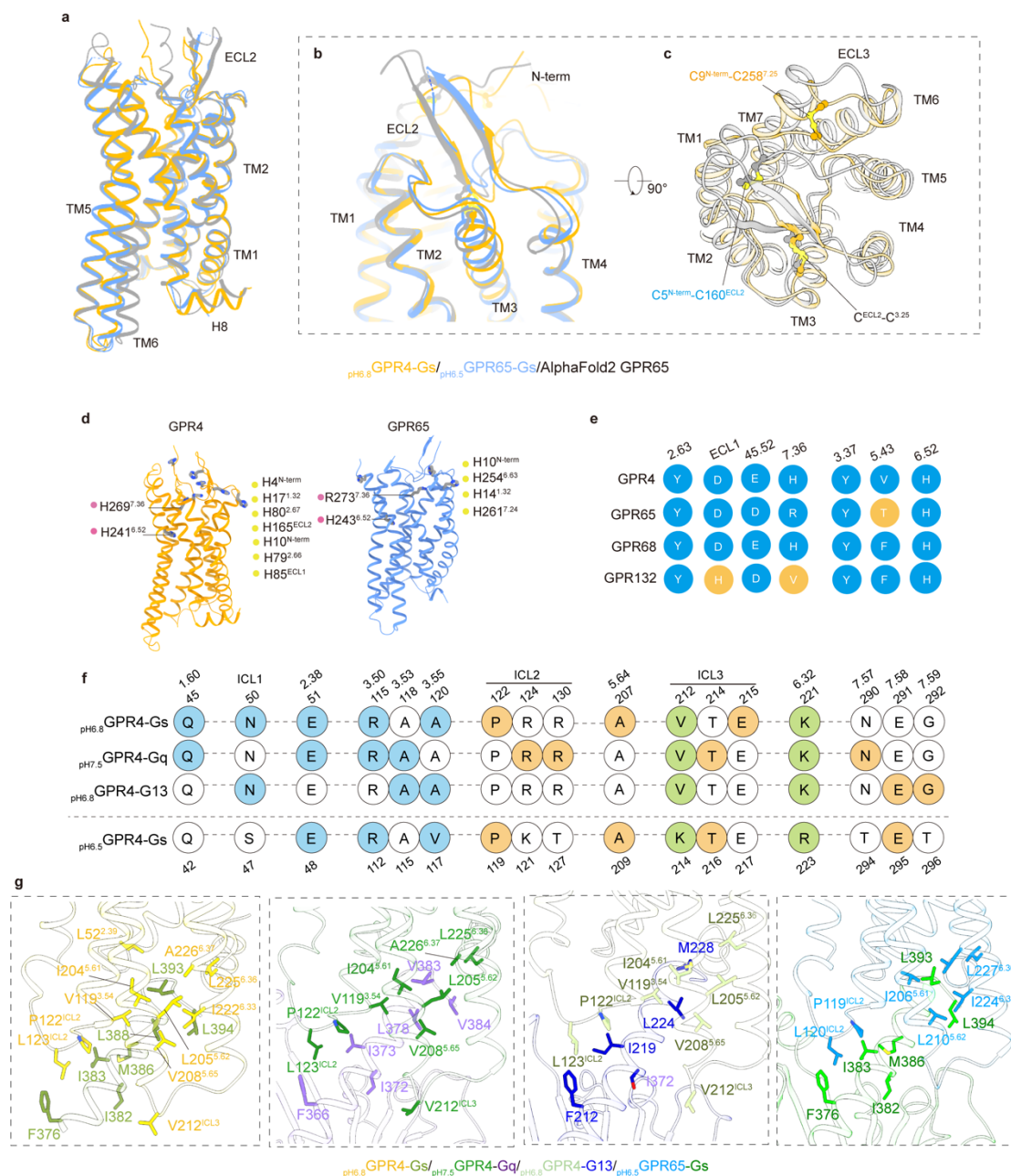


Fig. S6 Structural comparisons of GPR4 and GPR65 in proton sensing and G protein binding interface. a, Structural comparison of receptor in pH_{6.8}GPR4-Gs with pH_{6.0}GPR65-Gs complexes in side view and extracellular view. **b-c**, Structural comparison of ECL2 conformation in GPR4 and GPR65. **d**, Models of GPR4 and GPR65 showing the location of the extracellular His residues in GPR4 and GPR65. **e**, Comparison of the sequence alignment at key residues in proton sensing and activation in GPR4 and GPR65. **f**, Comparison of the sequence alignment at residues involved in

the G protein binding in GPR4 and GPR65. **g**, The detailed interactions between $\alpha 5$ helix and intracellular parts of receptor in GPR4-G_s, GPR4-G_q, GPR4-G₁₃ and GPR65-G_s.