



Supplementary information, Figure S3 The detergent molecule β -NG replaces a water molecule, but appears to have no effect on the local structures of polar residues. (A) The structure of the gate domain in the present occluded conformation and the previous inward-open conformation. The detergent molecule β -NG, which is sandwiched between TMs 5 & 12 in the inward-open structure, is shown as spheres. (B) One hydroxyl group of the β -NG molecule coincides with a water molecule for hydrogen-bonding to Glu241 and His245.