

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: HS-AFM movies of OmpG in lipid bilayers at pH 7.6 (left) and pH 5.0 (right) recorded at 200ms per frame. Middle panel show average of OmpG dimers at both pH values.

File Name: Supplementary Movie 2

Description: Unbiased 3 μ s-long molecular dynamic simulation (MDS) of OmpG (side view) at physiological pH using crystal structure of the open state OmpG (PDB: 2iwv).

File Name: Supplementary Movie 3

Description: Unbiased 3 μ s-long molecular dynamic simulation (MDS) of OmpG (top view) at physiological pH using crystal structure of the open state OmpG (PDB: 2iwv).

File Name: Supplementary Movie 4

Description: Unbiased 3 μ s-long molecular dynamic simulation (MDS) of OmpG (side view) at acidic pH using crystal structure of the open state OmpG (PDB: 2iww).

File Name: Supplementary Movie 5

Description: Unbiased 3 μ s-long molecular dynamic simulation (MDS) of OmpG (top view) at acidic pH using crystal structure of the open state OmpG (PDB: 2iww).