Supplementary Information

Low-temperature FTIR spectroscopy evidences proteinbound water molecules in eubacterial light-driven ion pumps

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Figure S1. The difference IR spectra for KR2 (a), NdR2 (b), FR (c), N110D/Q121E/S255F FR (d), and GR (e) in the 2800-2000cm⁻¹ region. Each sample was measured at 77 K upon hydration with D_2O (red line) and $D_2^{18}O$ (blue line). The underlined frequencies are N-D stretches of the Schiff base. One division of the y axis corresponds to 0.001 absorbance units. The spectra in (a) and (e) are reproduced from Ono *et al.* (2014) and Hashimoto *et al.* (2010), respectively.