

Supplementary Information

**Low-Temperature FTIR Spectroscopy of the L/Q Switch of
Proteorhodopsin**

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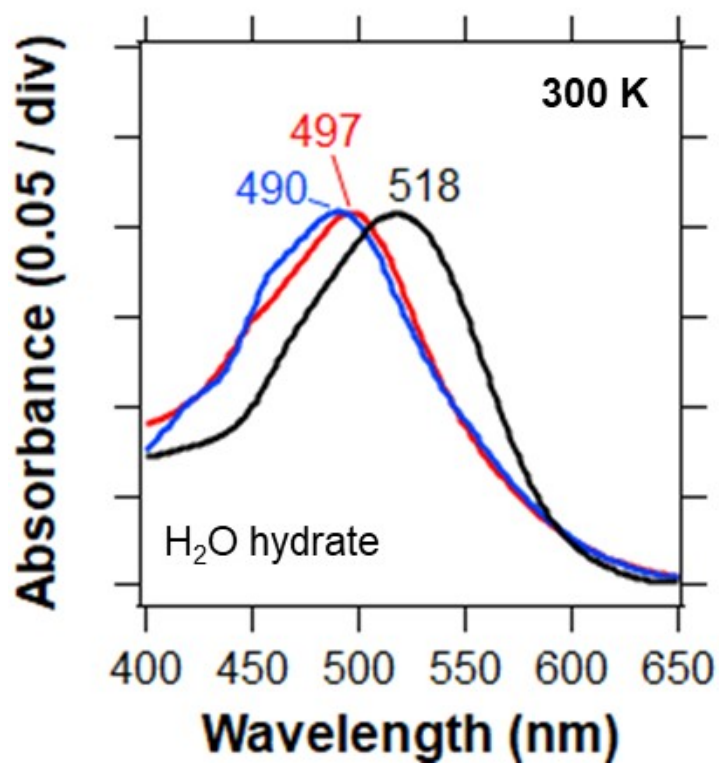


Fig. S2 UV-visible absorption spectra of hydrated films of GPR (black line), L105Q GPR (red line), and BPR (blue line) at pH 10 and 300 K.

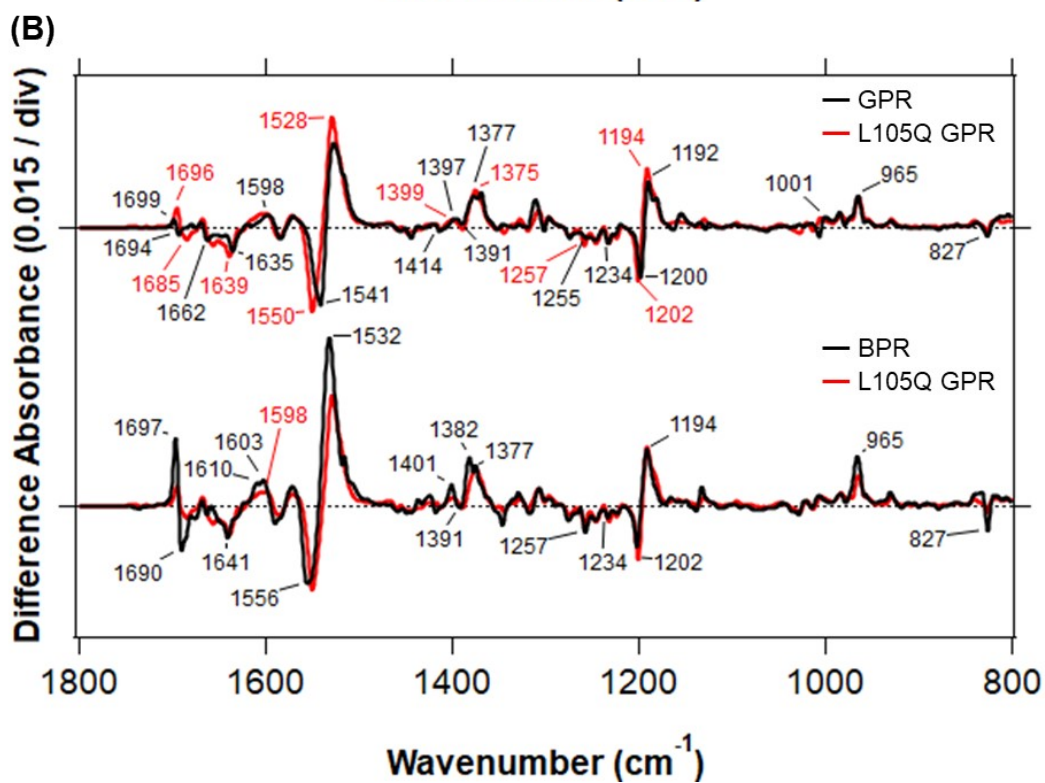
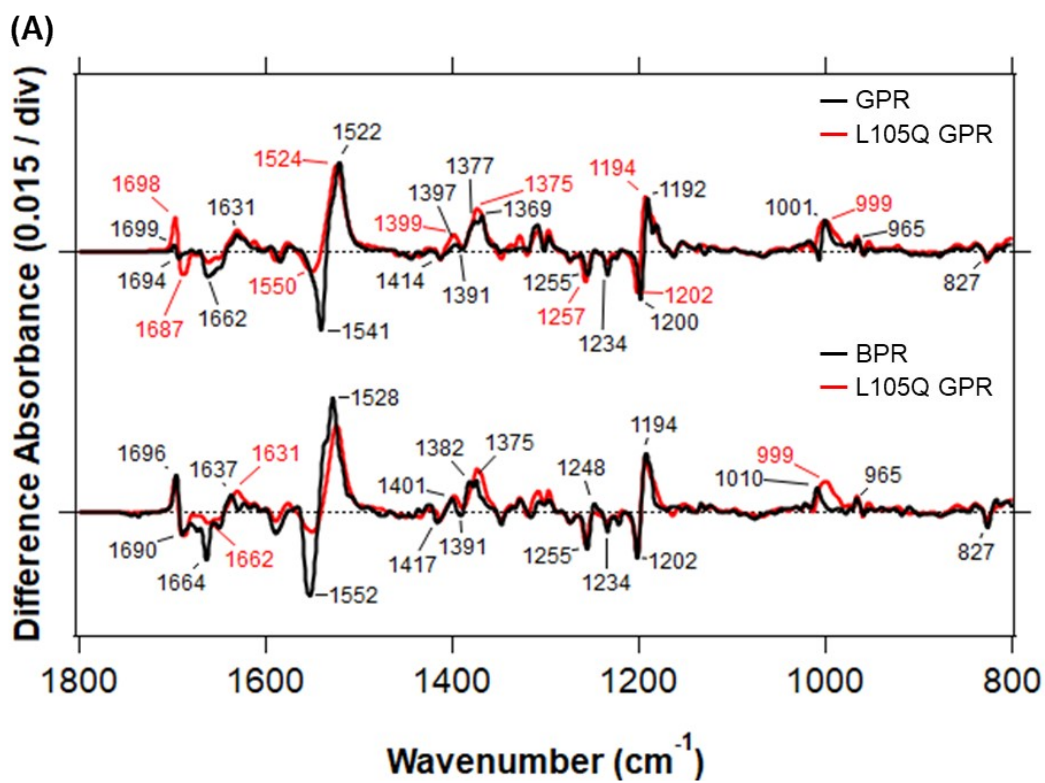


Fig. S3 Light-induced difference FTIR spectra of GPR (black line in the top panel), L105Q GPR (red lines), and BPR (black line in the bottom panel) in H₂O (A) and D₂O (B). Data of (A) and (B) for each spectrum are from Fig. 3.

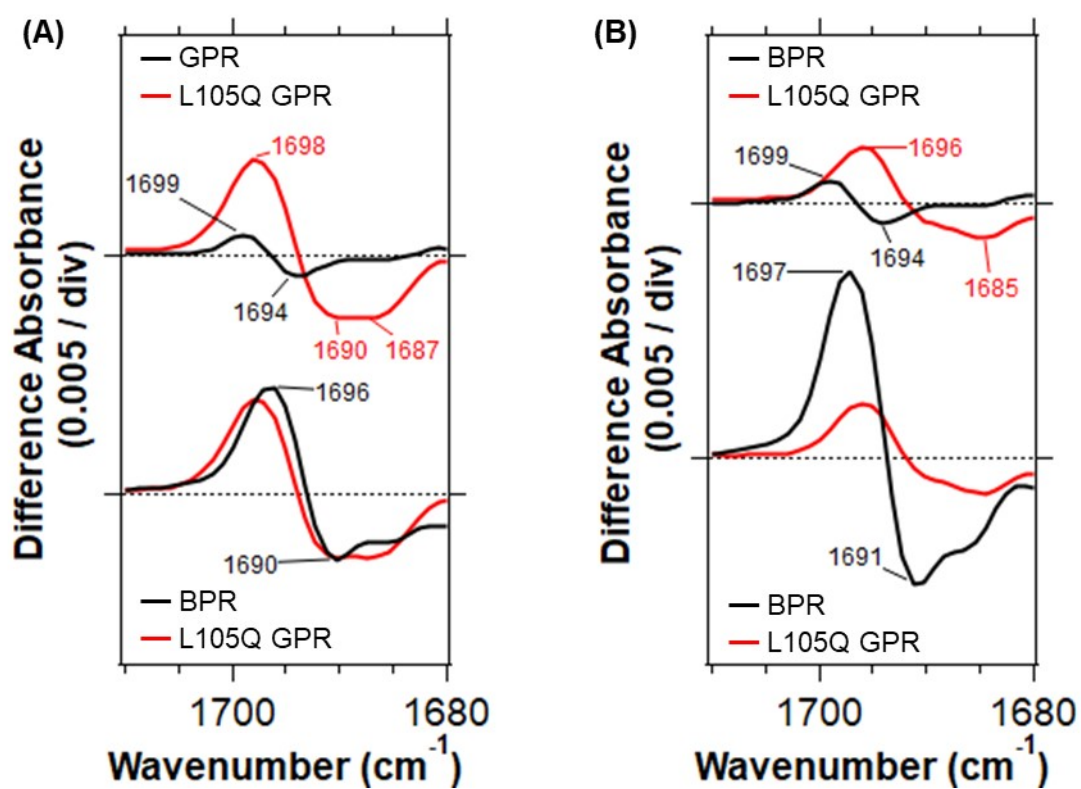


Fig. S4 Light-induced difference FTIR spectra of GPR (black line in the top panel), L105Q GPR (red lines), and BPR (black line in the bottom panel) in H₂O (A) and D₂O (B). Data of (A) and (B) for each spectrum are from Fig. 4.