Supporting Information

for

Temperature-Dependent Solid-State Electron Transport through Bacteriorhodopsin: Experimental Evidence for Multiple Transport Paths through Proteins

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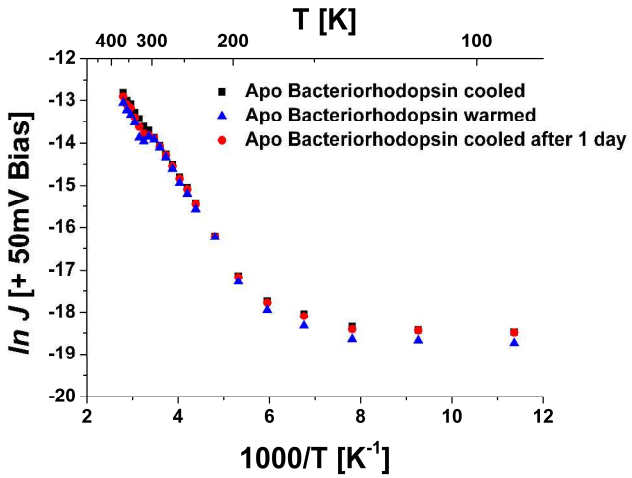

Figure S1. *ln* (current density) - temperature plots for Apo bR monolayer junctions at +50 mV bias to the top electrode. Stable currents and temperature dependent reversibility was achieved upon cooling the sample (from high to low temperature) or heating (*vice versa*), and cooling back one day after the first set of measurements.

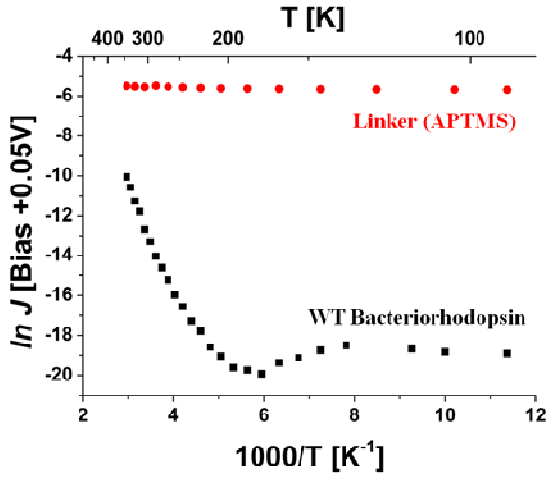

Figure S2. *ln*(current density) - temperature plots via 3-aminopropyl) trimethoxysilane, APTMS, and WT bR monolayer junctions at +50 mV bias to the top electrode.

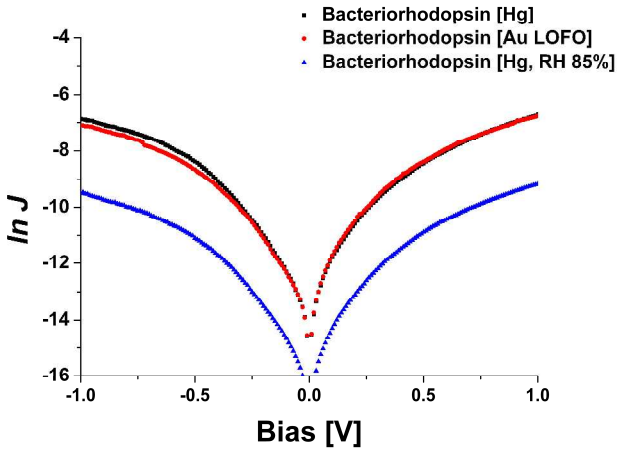

Figure S3. *ln*(current density) –applied bias plots of WT bR monolayer junctions at ±1 V bias to the top electrode at room temperature. Junctions with Au LOFO contacts have similar currents to those made with a mercury electrode in 20% RH (red and black, top curves). Currents at RH=85% are smaller at room temperature, likely due to the addition of molecular water layer between the sample and the top electrode.

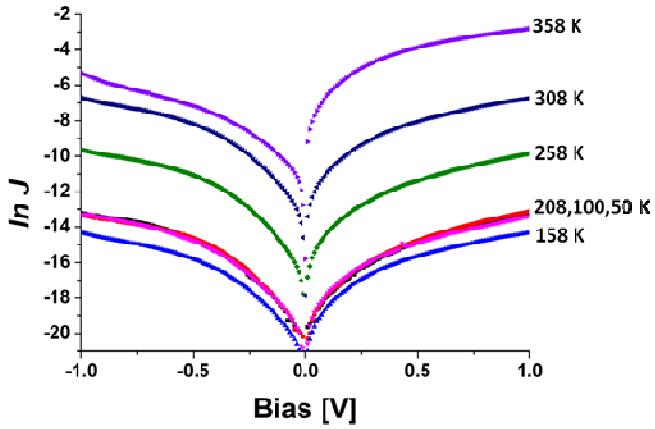

Figure S4. *ln*(current density) - applied bias plots of WT bR monolayer junctions at ±1 V bias to the top electrode. Temperatures are given next to the plots.