



**Figure S2: Cross-bridge free energy and kinetics at multiple lattice spacings** (A)–(B) show the free energies of the 4sXB and the 2sXB models at lattice spacings between 30 and 38 nm. (C)–(H) show the kinetic rate constants of the 4sXB and the 2sXB models at lattice spacings between 30 and 38 nm. Each rate is a section taken from the corresponding display in Figure 3.