



**Figure 6-figure supplement 5. The Lid-ATPase interaction may account for the different growth phenotypes of yeast Walker-B mutants.** The translocation rate was calculated for each Walker-B mutant proteasome (ATP hydrolysis set to zero) using the FEL model involving the ATPase-Lid interaction as described in methods §9.5. The growth phenotype of each Walker-B mutant is adapted from a previous study; “+++++”: healthy; “+++”: slightly sick; “++”: sick; “+”: near-lethal; “-”: lethal (9). Varying the ATPase-Lid interaction from 1.6 to 4.0 kcal/mol gave qualitatively-similar results.