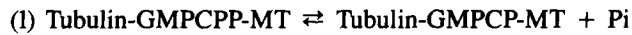
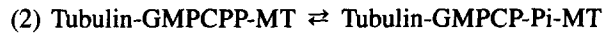


Caplow et al. Vol. 127, No. 3, November 1994. Pages 779–788.

An error was made in applying the measured  $-0.9$  kcal/mol standard free energy for the reaction:



to calculate the free energy for the partial reaction, forming the ternary complex containing bound Pi:



With a standard free energy for reaction 1 equal to  $-0.9$  kcal/mol, for the case where the  $K_d$  for Pi is equal to 25 mM, the standard free energy for reaction 2 is  $-3.06$  kcal/mol. It is noted that results from this lab and from Trinczek et al. (1993. *Mol. Biol. Cell.* 4:323–335.) have failed to detect stabilization of microtubules by 100–170 mM Pi, so that the  $K_d$  for this substance may be  $>250$  mM, rather than 25 mM, used in this calculation. If this is the case, then the free energy for forming the Tubulin-GMPCP-Pi ternary complex is equal to  $>-1.72$  kcal/mol; the corresponding value for myosin-ADP-Pi is  $-1.3$  kcal/mol. It is noted that, because Pi concentration is buffered in cells at  $\sim 1$  mM, as long as the  $K_d$  for Pi is  $<1$ , energy will be liberated when Pi dissociates from the ternary complex formed in reaction 2.

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