

Substrate and Enzyme Biphasic Response in the Random Double Site Modification (Separate kinase and separate phosphatase)

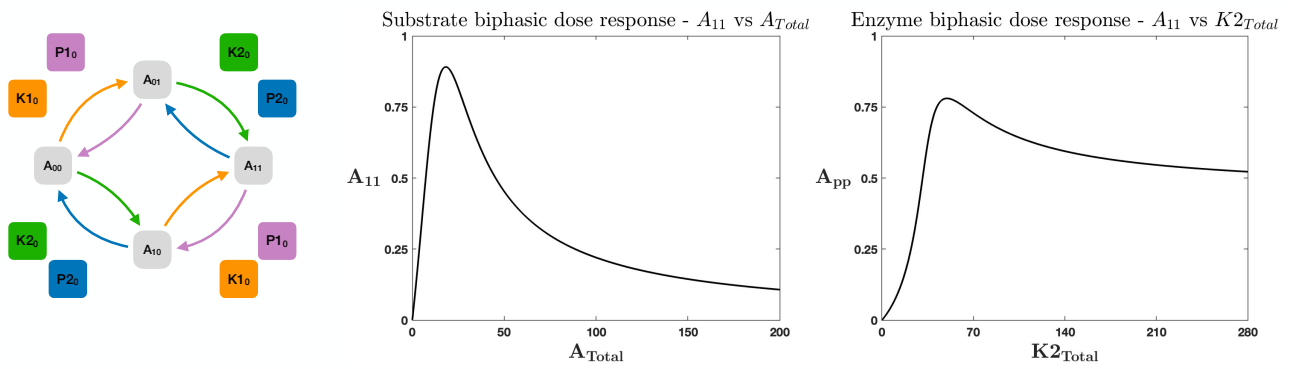


Figure 2 – figure supplement 2: **Biphasic responses in random double site modification network with separate enzymes effecting each modification.** While the ordered DSP with separate enzymes acting on each modification site is incapable of exhibiting any biphasic dose response, random ordered (de)modification exhibits both substrate (*left*) and enzyme (*right*) biphasic dose response. This illustrates how additional complexity (inherently) associated with enzyme mediated substrate modification (random) can further expand propensity for such networks containing them to generate biphasic dose response.