

AFFECTED PARAMETER

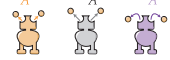
AFFECTED QUANTITY

INDUCTION PROFILE

FREE ENERGY SHIFT

inducer binding

$$K_A^{(mut)} < K_A^{(wt)} < K_A^{(mut)}$$



$$K_I^{(mut)} < K_I^{(wt)} < K_I^{(mut)}$$

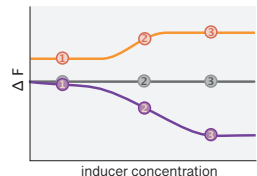
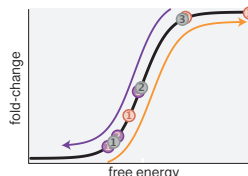
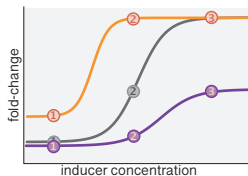
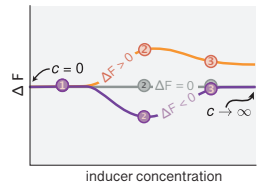
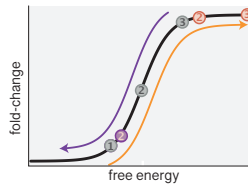
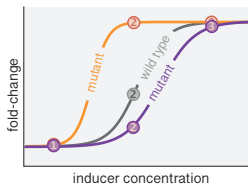


allosteric energy difference

$$\Delta\epsilon_{AI}^{(mut)} < \Delta\epsilon_{AI}^{(wt)} < \Delta\epsilon_{AI}^{(mut)}$$



$$-k_B T \log \left(\frac{p_{act}^{(mut)}(c)}{p_{act}^{(wt)}(c)} \right)$$

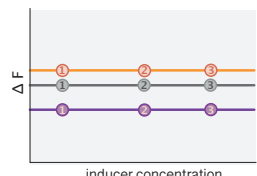
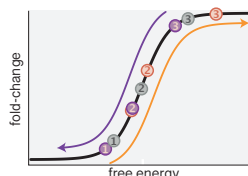
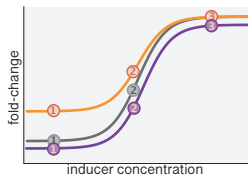


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$$R^{(mut)} < R^{(wt)} < R^{(mut)}$$



$$-k_B T \log \left(\frac{R^{(mut)}}{R^{(wt)}} \right)$$



DNA binding energy

$$\Delta\epsilon_{RA}^{(mut)} < \Delta\epsilon_{RA}^{(wt)} < \Delta\epsilon_{RA}^{(mut)}$$



$$\Delta\epsilon_{RA}^{(mut)} - \Delta\epsilon_{RA}^{(wt)}$$

