

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

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



$$-\log \frac{p_{\text{active}}^{(mut)}(c)}{p_{\text{active}}^{(wt)}(c)}$$

$$-\log \frac{p_{\text{active}}^{(mut)}(c)}{p_{\text{active}}^{(wt)}(c)}$$

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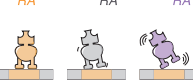
$$R^{(mut)} < R^{(wt)} < R^{(mut)}$$



$$-\log \frac{R^{(mut)}}{R^{(wt)}}$$

DNA binding energy

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



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

