

P.1598 right column bottom paragraph:

It may seem that this low p_{bind} would make the TF search hopelessly inefficient. However, in terms of search efficiency, one has to take into account that the TF returns many times ($s_L/\sqrt{2}$) before leaving the capture region of the operator DNA. In the refined search model, including the low p_{bind} , the sliding distance is $s_L = 45 \pm 10$ bp and the overall probability of binding a $lacO_I$ operator, including multiple return events, is $53 \pm 24\%$ (supplementary text and figs. S1 and S2).

P.1598 middle column bottom paragraph:

We have demonstrated here that the *lac* repressor slides into its chromosomal operators in living bacterial cells. The average sliding distance is $s_L = 45 \pm 10$ bp, which is close to what is measured in vitro (5, 7) for ionic strengths corresponding to 0.15 M monovalent cations (21). The sliding makes the search for a $lacO_I$ operator 40 times as fast (Eq. S8) as the situation where the repressor binds DNA nonspecifically but does not slide. In relation to a hypothetical