



Figure x: Phage integration and excision

a. Expression of Integrase only mediates the recombination between an attP (for Phage) and an attB (for bacteria) sites. This results in the integration of the phage DNA inside attB on the bacterial chromosome. Two sites are created: attL containing the left part of the attB site and the right part of the attP site; attR containing the left part of the attP site and the right part of the attB site.

b. Coupled expression of Integrase and Excisase promotes the recombination between an attL and an attR sites, resulting in the reformation of the initial attB and attP sites. This LR reaction allows the excision of the phage DNA from the bacterial chromosome.