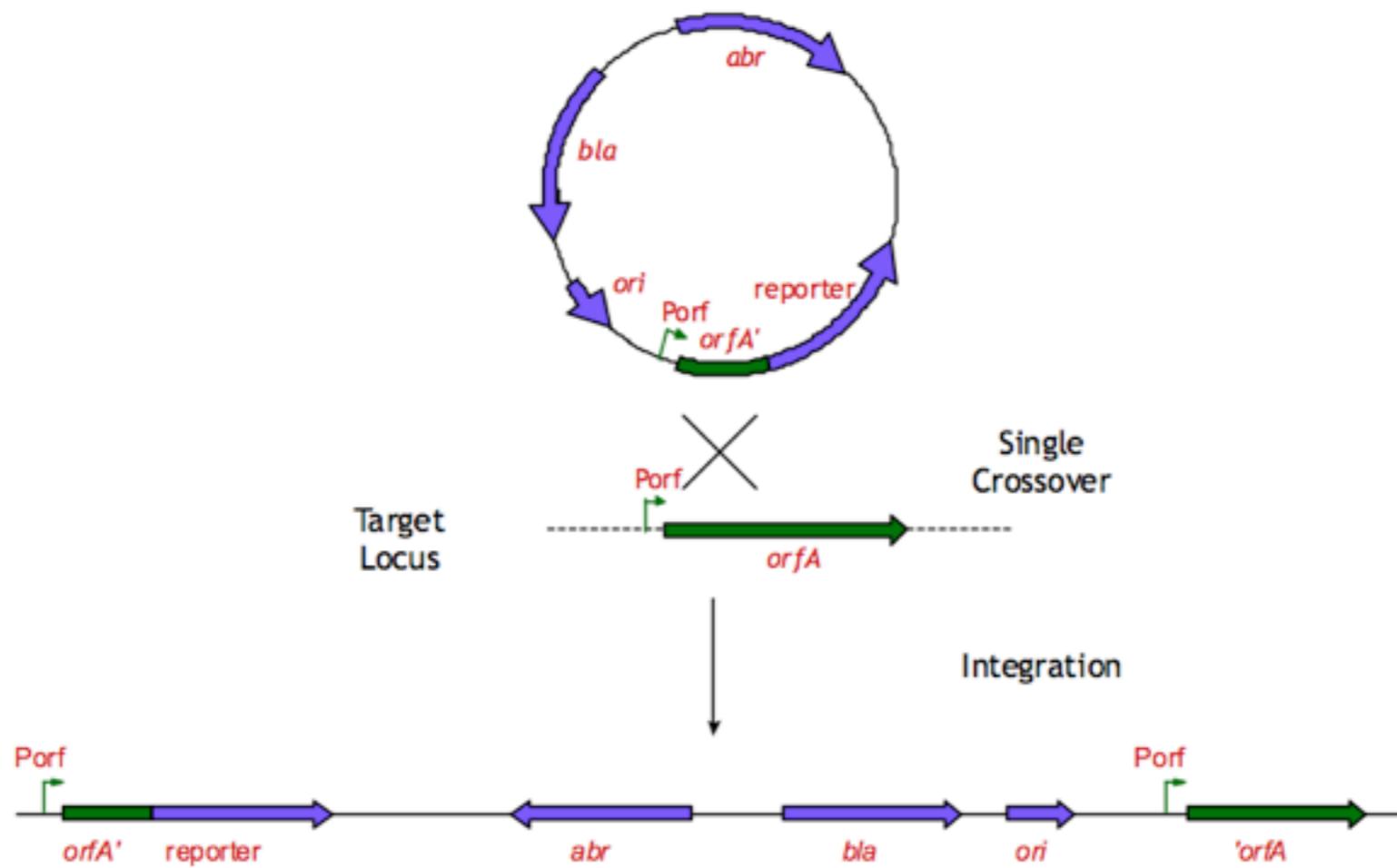


Bacillus reporter strains



Schematic diagram of reporter strain construction. A plasmid is constructed that has the promoter (Porf) of the gene of interest (*orfA*) cloned in front of a reporter (e.g. LacZ). When the promoter for *orfA* is active, the reporter protein is produced and measured (for lacZ, by β -galactosidase activity [blue colour]). For example if the promoter for *fabF* is fused to the reporter, when *fabF* is highly expressed, a blue colour will result in the strain. Cerulenin, is an inhibitor of FabF, when it is added to the cells, the inhibition of FabF results in the strain trying to make more FabF, thus the promoter for *fabF* is highly activated. This would result in the reporter strain producing a blue colour on exposure to cerulenin. This strain would thus act as a reporter for *fabF* inhibitors.