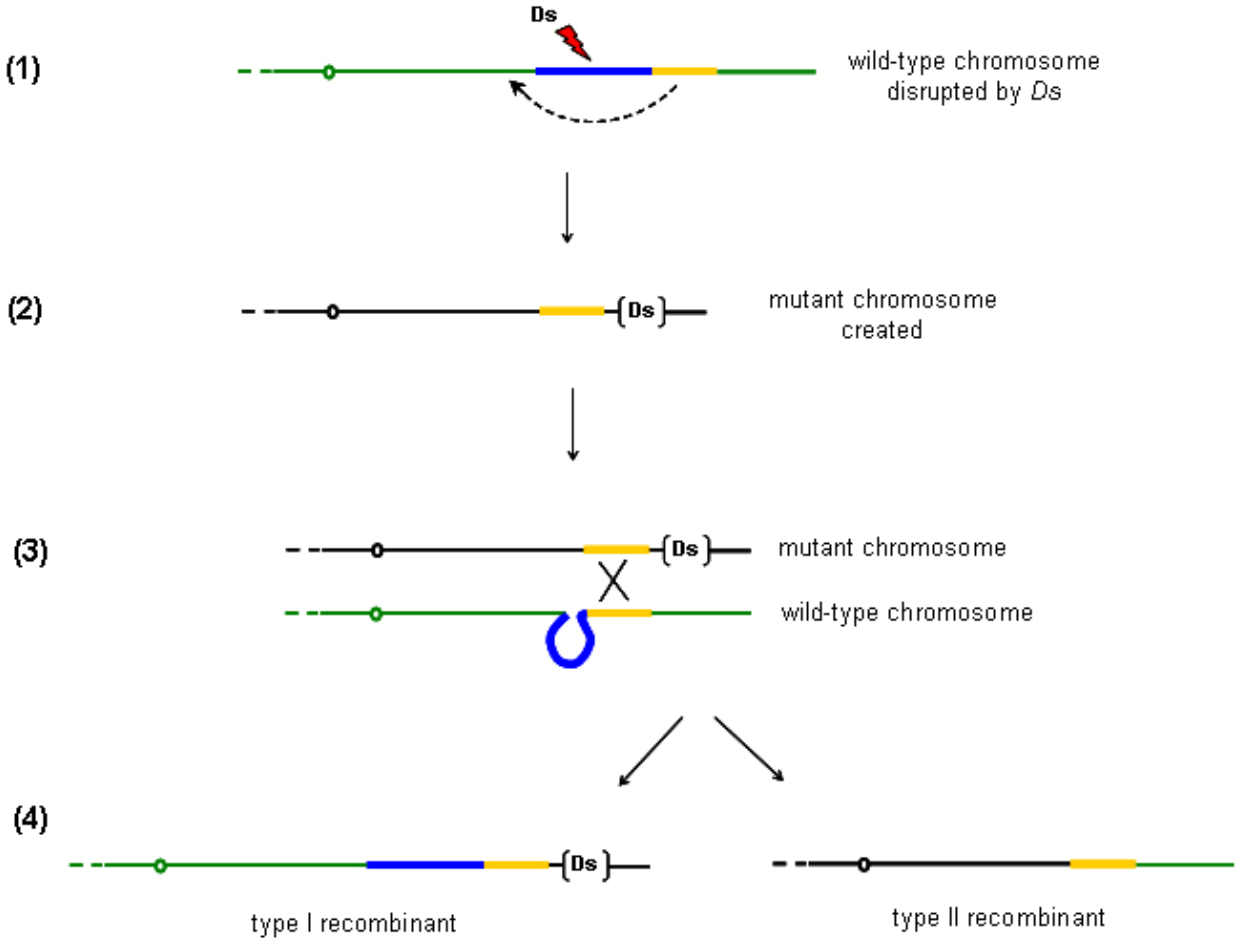
(1)
Ds
wild-type chromosome
disrupted by *Ds*
(2)
Ds
mutant chromosome
created
(3)
Ds
mutant chromosome
wild-type chromosome
(4)
Ds
type I recombinant
type II recombinant