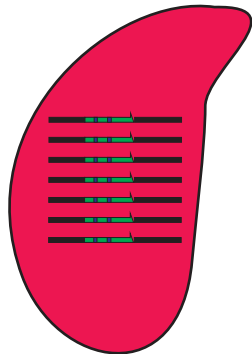


step I

DHFR-TS
wildtype

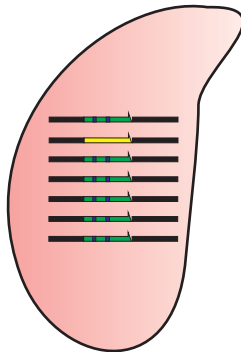


wildtype contains the functional
endogenous DHFR-TS gene
(in 45 copies, ARPs)

transformation
with the pKOI plasmid

step II

DHFR-TS
transformant

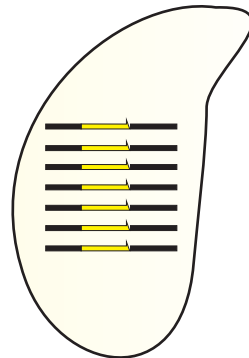


transformant,
contains at least
one recombinant
DHFR-TS k.o. allele

allelic / phenotypic
assortment

step III

DHFR-TS
deficient strain



loss of DHFR-TS activity
because of complete
replacement of the
functional DHFR-TS gene
by the k.o. allele