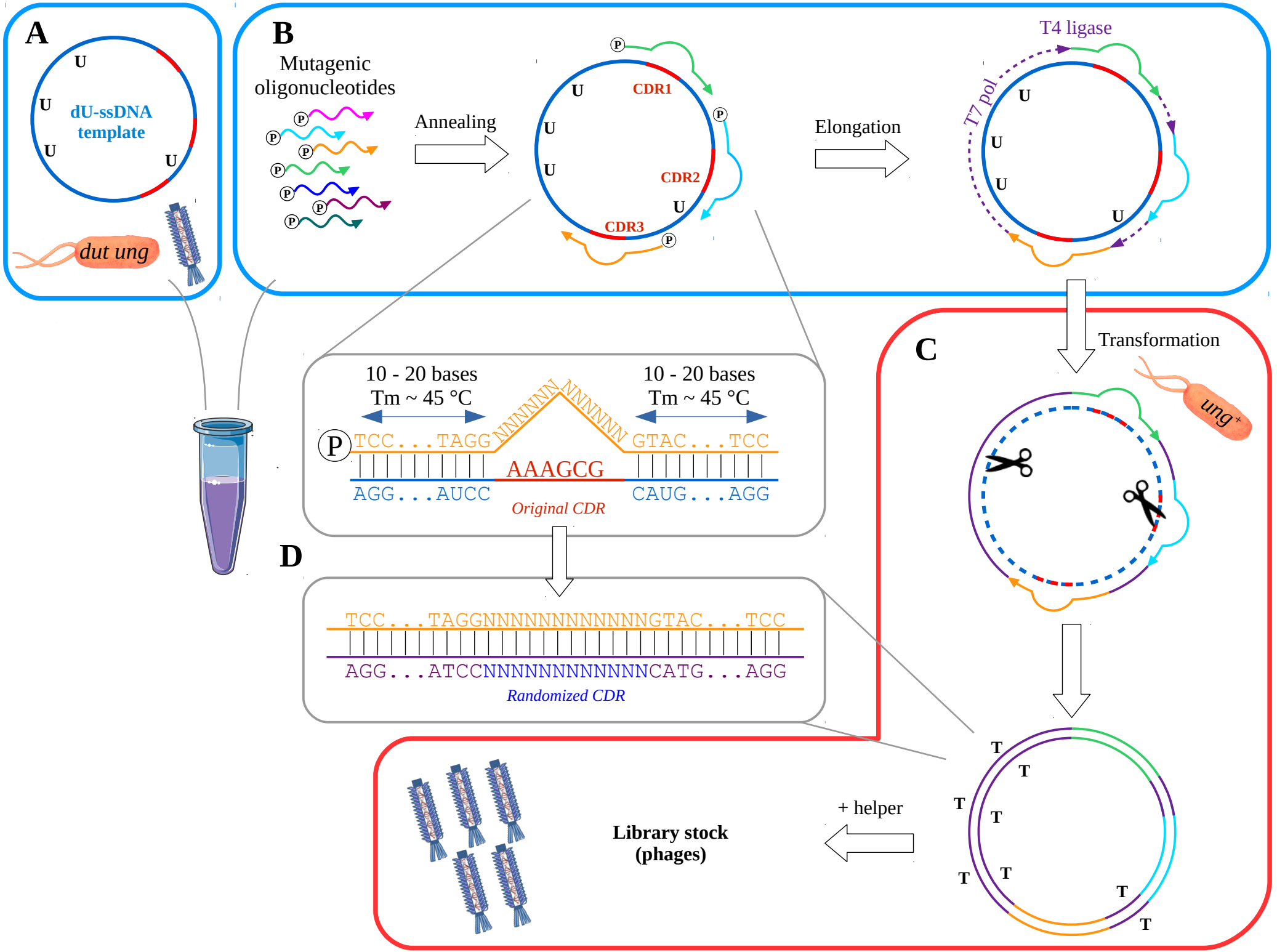
A
U
U
U
U
dU-ssDNA template
dut ung
B
Mutagenic oligonucleotides
P
Annealing
U
CDR1
CDR2
CDR3
Elongation
T4 ligase
T7 pol
C
Transformation
ung+
T
+ helper
Library stock (phages)
10 - 20 bases
Tm ~ 45 °C
NNNNNN
TCC...TAGG
GTAC...TCC
AAAGCG
AGG...AUCC
CAUG...AGG
Original CDR
D
TCC...TAGGNNNNNNNNNNNNNGTAC...TCC
AGG...ATCCNNNNNNNNNNNNNCATG...AGG
Randomized CDR