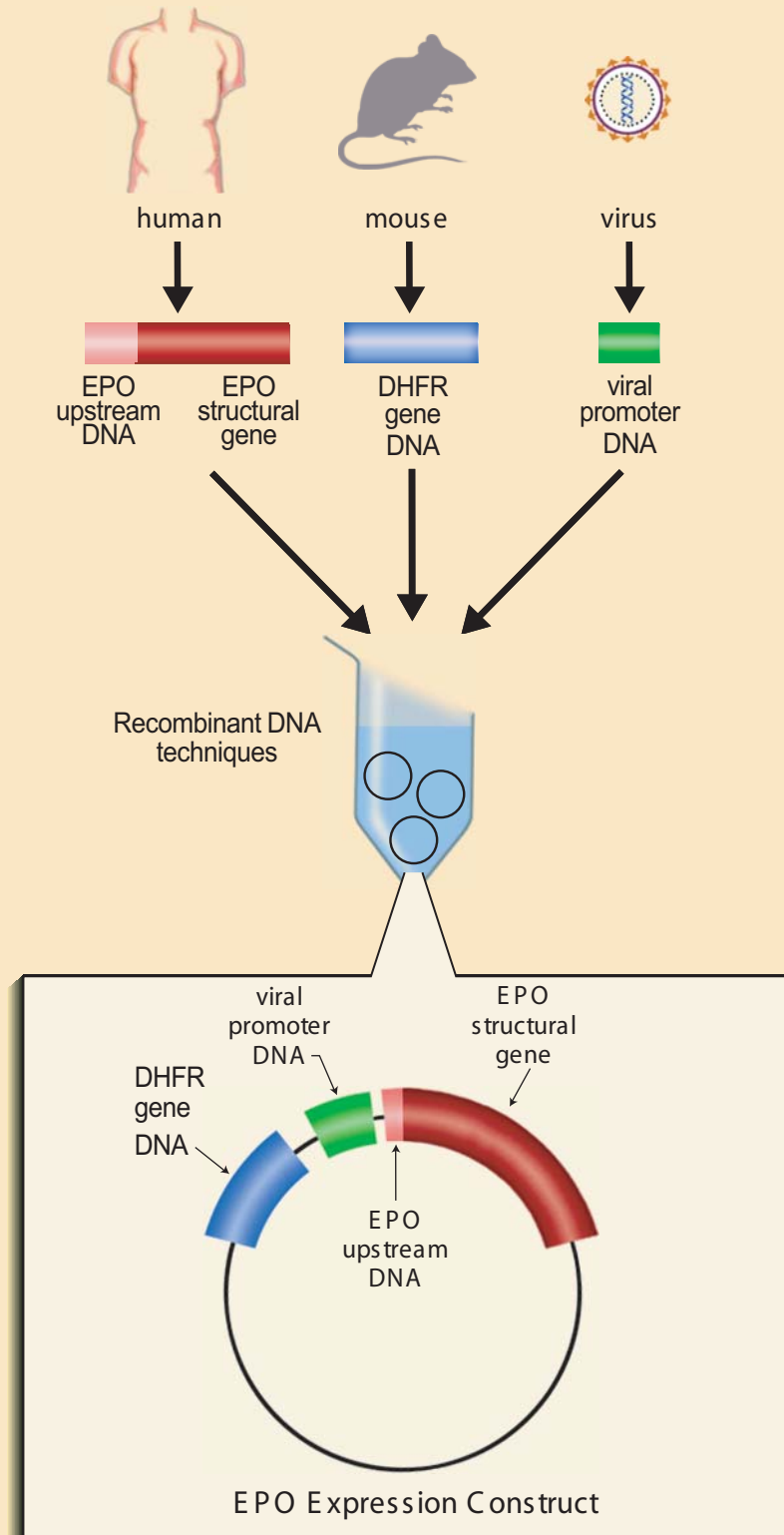


**LODISH DECLARATION
EXHIBIT C**

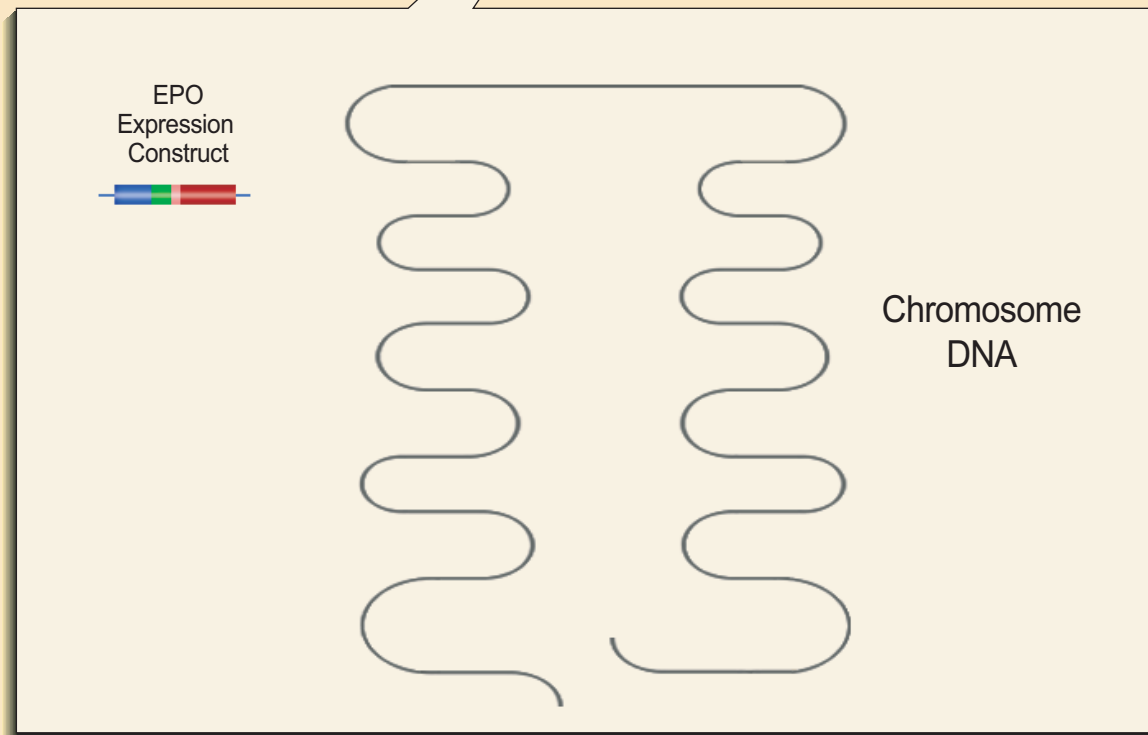
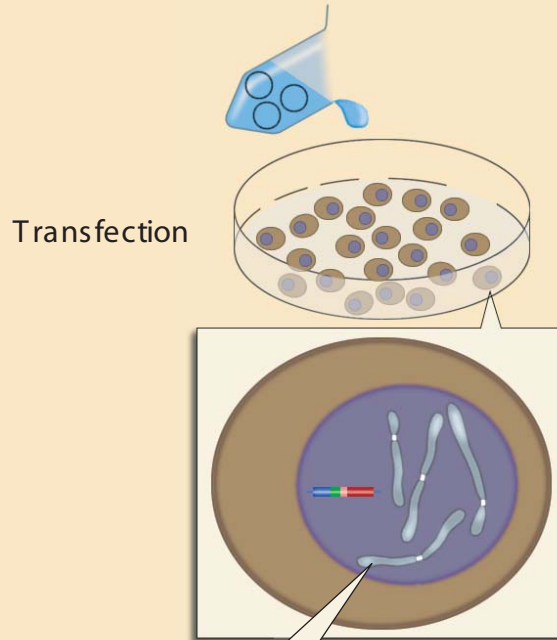
Lin Example 10

Vector Construction



Lin Example 10

Transfection

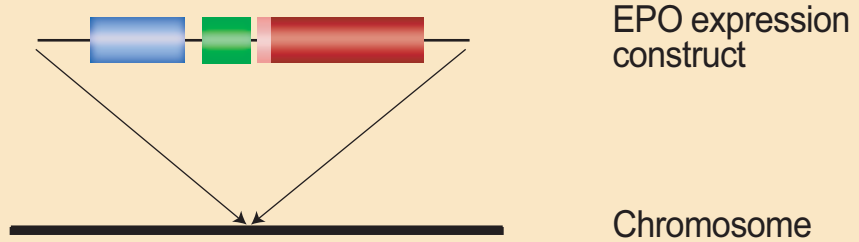


■ EPO structural gene ■ EPO upstream DNA ■ Viral promoter DNA ■ DHFR gene DNA

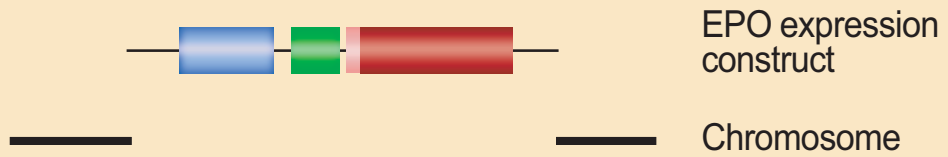
Lin Example 10

Transfection / Recombination / Integration

Transfection



Recombination



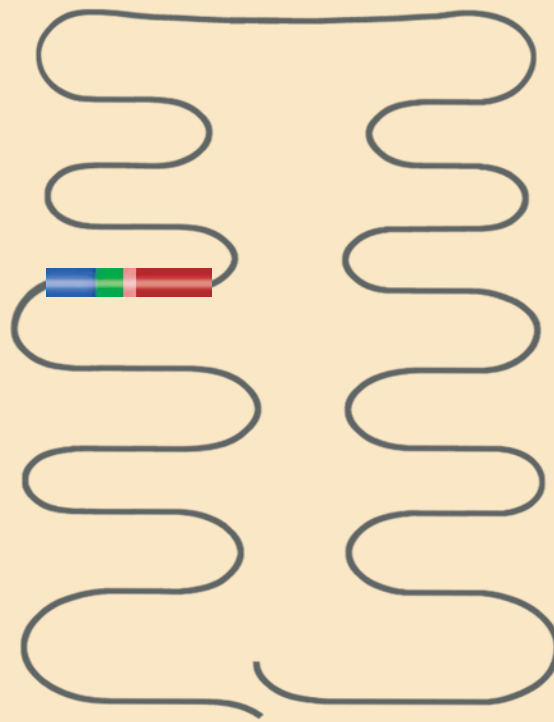
Integration



■ EPO structural gene ■ EPO upstream DNA ■ Viral promoter DNA ■ DHFR gene DNA

Lin Example 10

Recombinant Chromosome



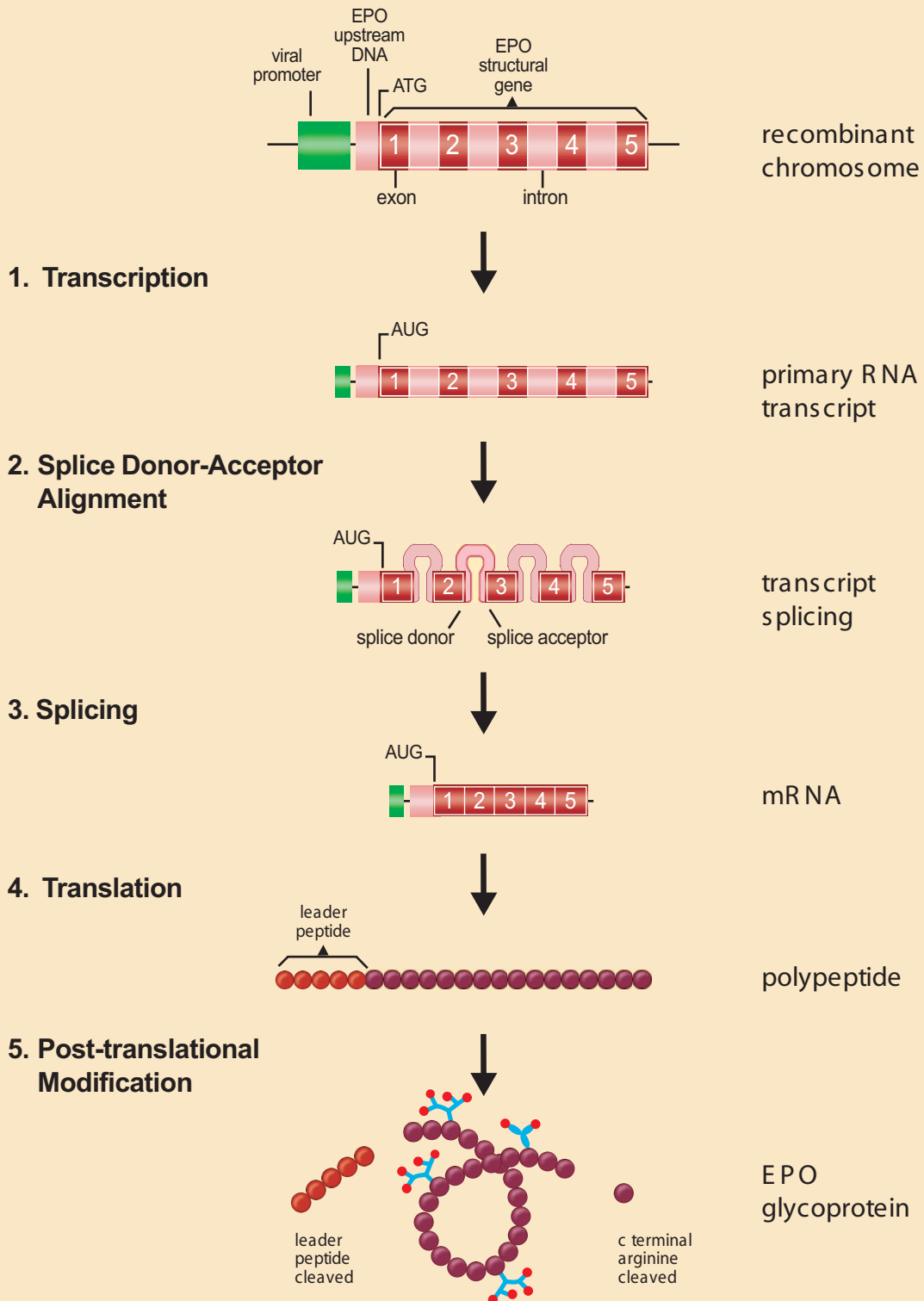
Recombinant
Chromosome
DNA

Random Integration



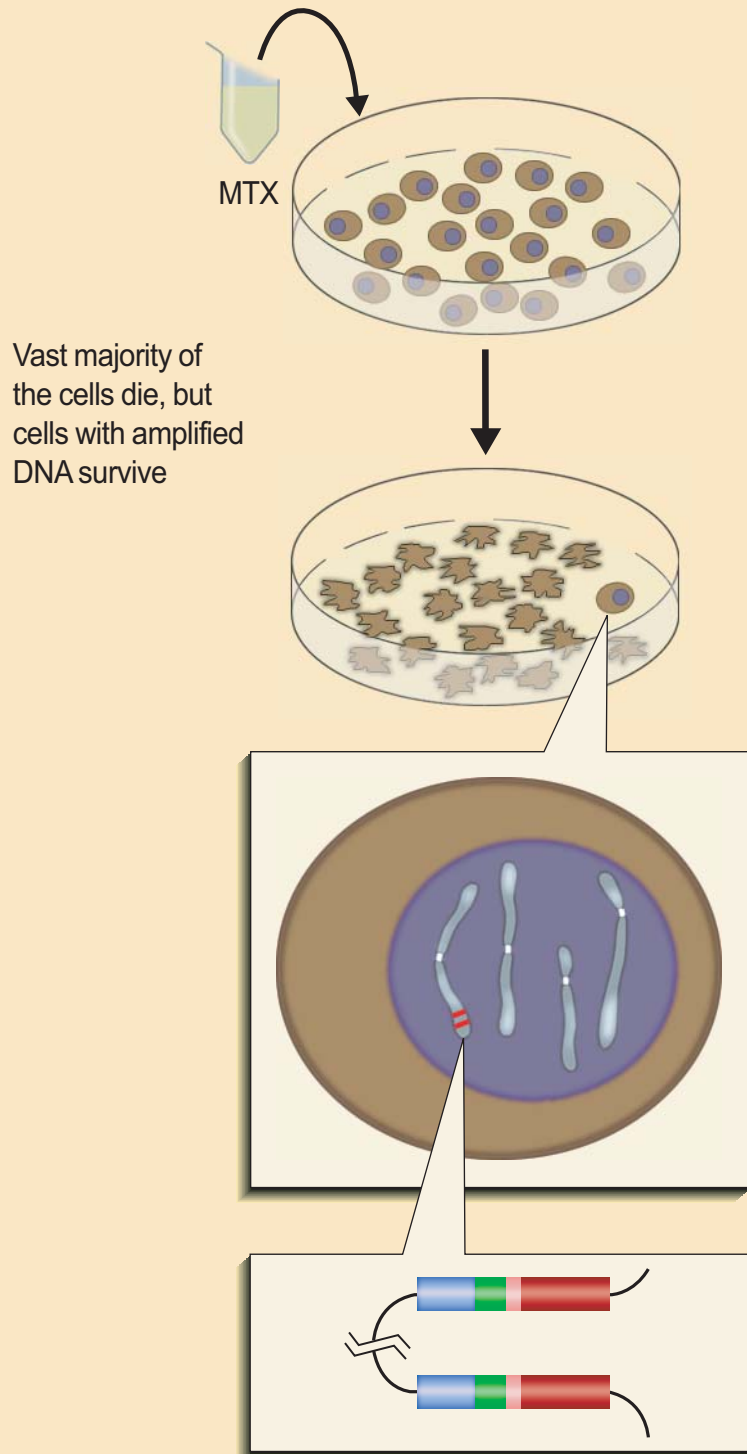
Lin Example 10

EPO Protein Expression



Lin Example 10

DNA Amplification



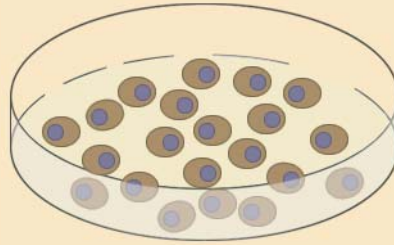
Vast majority of the cells die, but cells with amplified DNA survive

■ EPO structural gene ■ EPO upstream DNA ■ Viral promoter DNA ■ DHFR gene DNA

Lin Example 10

Re-Amplification

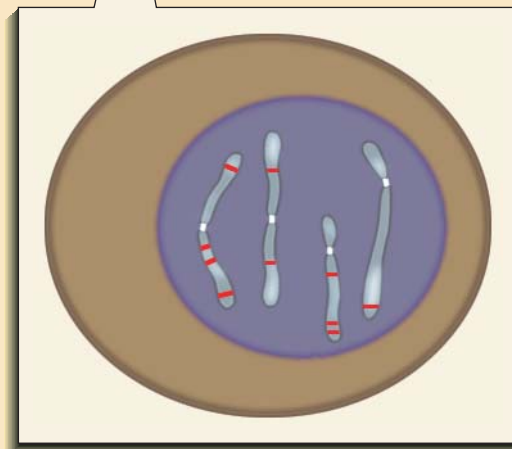
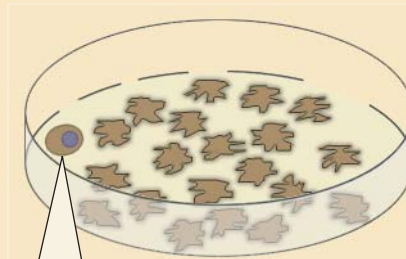
Cultured cells containing amplified DNA



Additional cycles of MTX selection



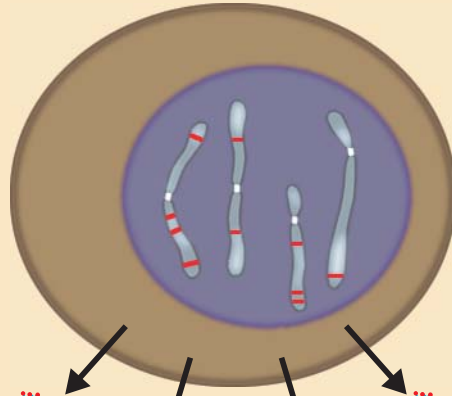
Cells with further amplified DNA survive



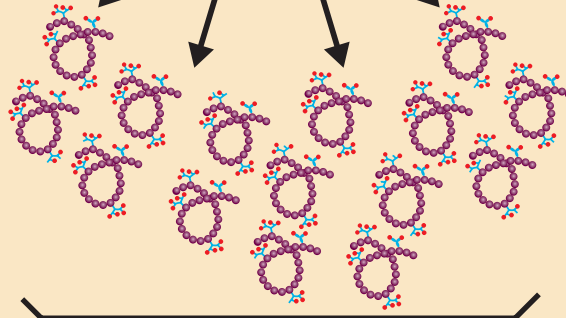
Lin Example 10

Process for EPO Production

Cells with amplified EPO DNA



Production of EPO protein



Purification of EPO protein



Pharmaceutical EPO

