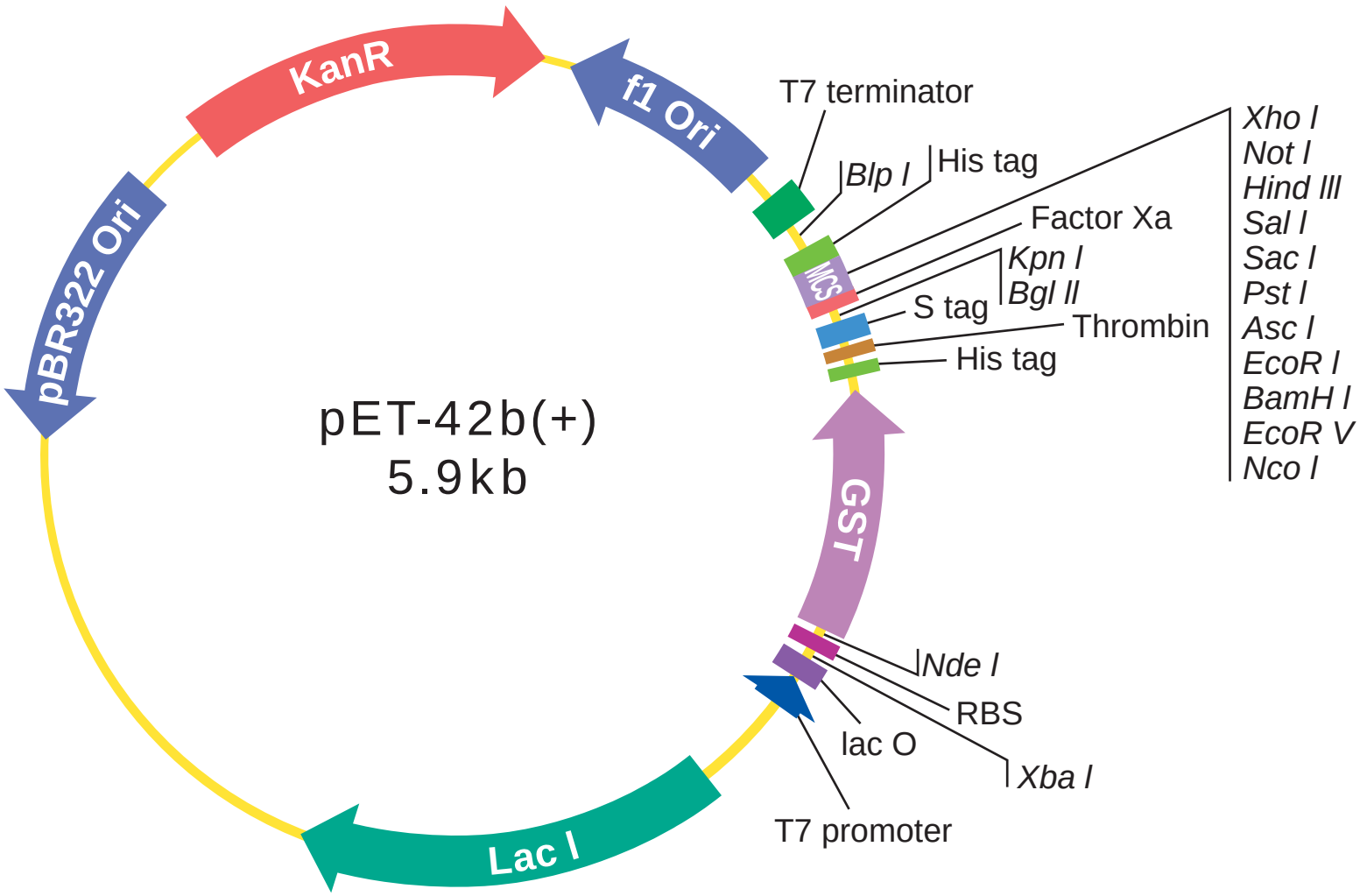

T7 promoter — lac operator — *Xba* I — rbs — *Nde* I — GST tag

--- T AAT ACG ACT CAC TAT AGG GGA ATT GTG AGC GGA TAA CAA TTC CCC TCT AGA AAT AAT TTT GTT TAA CTT TAA GAA GGA GAT ATA CAT ATG TCC CCT ATA CTA GGT

M S P I L G

GST tag — His tag

TAT ... 627bp ... GAC CAT CCT CCA AAA TCG GAT GGT TCA ACT AGT GGT TCT GGT CAT CAC CAT CAC CAT CAC TCC GCG GGT CTG GTG CCA CGC GGT AGT ACT GCA ATT GGT

W ... 209aa ... D H P P K S D G S T S G S G H H H H H H S A G L V P R G S T A I G

thrombin site — S tag — *Bgl* II — *Kpn* I — *Nco* I — *Eco*R V

ATG AAA GAA ACC GCT GCT GCT AAA TTC GAA CGC CAG CAC ATG GAC AGC CCA GAT CTG GGT ACC GGT GGT GGC TCC GGT ATT GAG GGA CGC GGG TCC ATG GAT ATC GGG

M K E T A A A K F E R Q H M D S P D L G T G G G S G I E G R C S M G Y R

Factor Xa — *Bam*H I — *Eco*R I — *Asc* I — *Pst* I — *Sac* I — *Sal* I — *Hind* III — *Not* I — *Xho* I — His tag

GAT CCG AAT TCT GTA CAG GCC TTG GCG CGC CTG CAG GCG AGC TCC GTC GAC AAG CTT GCG GCC GCA CTC GAG CAC CAC CAC CAC CAC CAC CAC CAC TAA TTG ATT AAT ACC

G S E F C T G L G A P A G E L R R Q A C G R T R A P P P P P P P L I D Stop

Blp I — T7 terminator

TAG GCT GCT AAA CAA AGC CCG AAA GGA AGC TGA GTT GGC TGC TGC CAC CGC TGA GCA ATA ACT AGC ATA ACC CCT TGG GGC CTC TAA ACG GGT CTT GAG GGG TTT TTT G ---