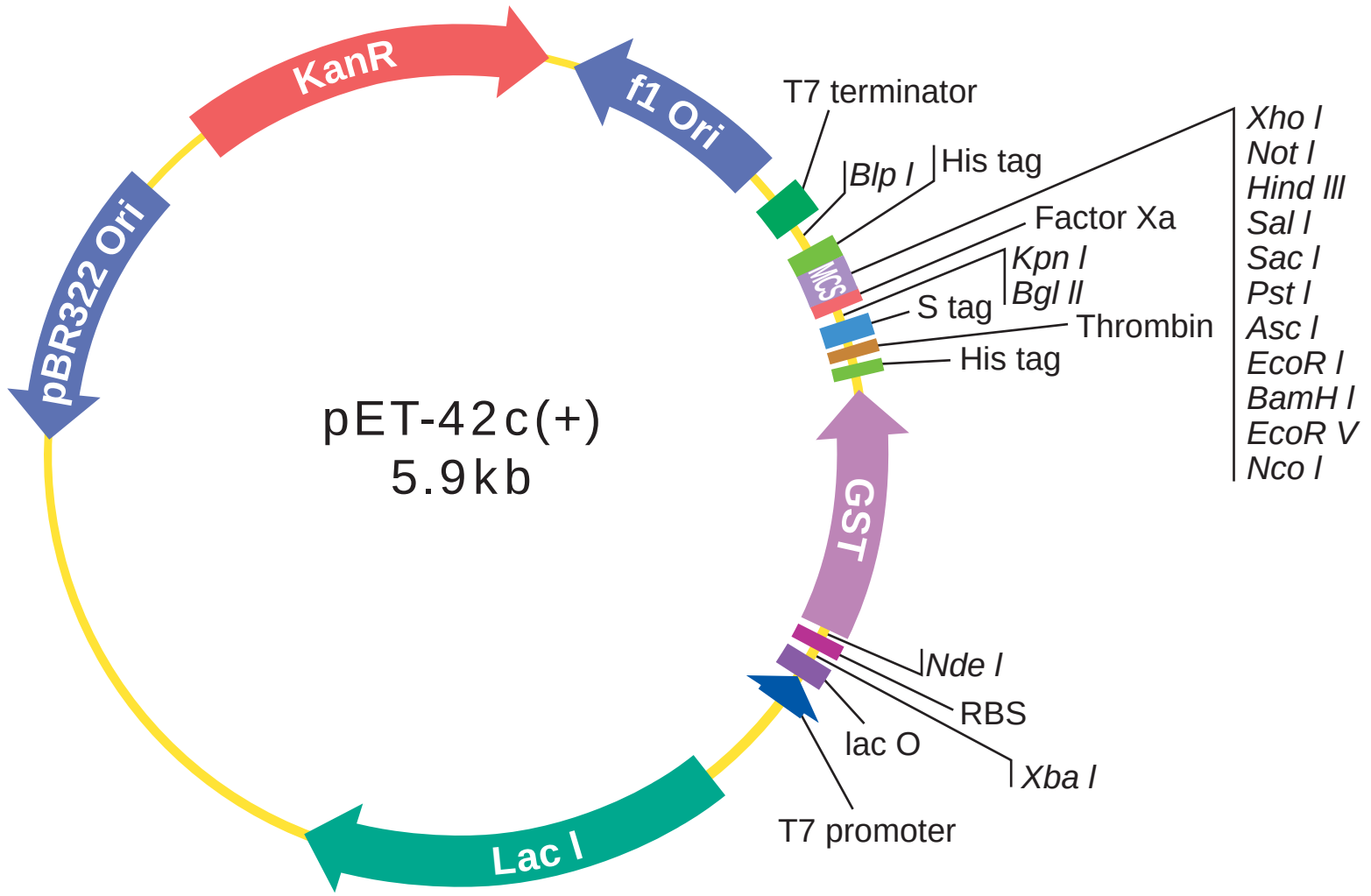

T7 promoter — lac operator — *Xba* I — rbs — *Nde* I — GST tag

--- 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 GCG ATA TCG

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

GGG ATC CGA ATT CTG TAC AGG CCT TGG CGC GCC TGC AGG CGA GCT CCG TCG ACA AGC TTG CGG CCG CAC TCG AGC ACC ACC ACC ACC ACC ACC ACC ACT AAT TGA TTA ATA

G I R I L Y R P W R A C R R A P S T S L R P H S S T T T T T T T N Stop

Blp I — T7 terminator

CCT AGG CTG CTA AAC AAA GCC CGA AAG GAA GCT GAG TTG GCT GCT GCC ACC GCT GAG CAA TAA CTA GCA TAA CCC CTT GGG GCC TCT AAA CGG GTC TTG AGG GGT TTT TTG ---