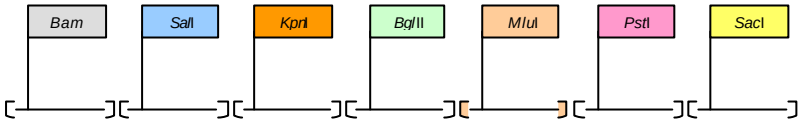
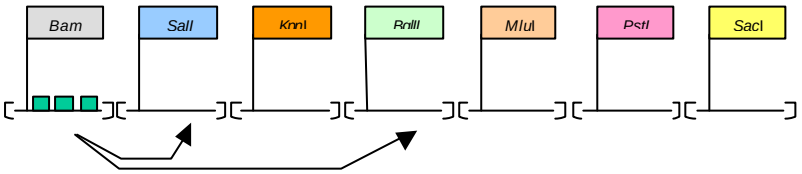
Design & Build Approach
Selection of natural variants



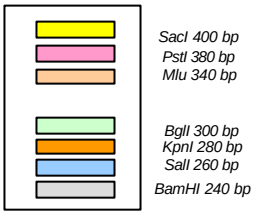
Schematic presentation of the seven *gla*A loci of the A.niger ISO-502 host strain, each marked with a unique restriction enzyme as “DNA -flag”

Development of the primary production strain with a defined number of expression units integrated in the *Bam*HI Δ*gla*A amplicon by using the marker-gene free approach.

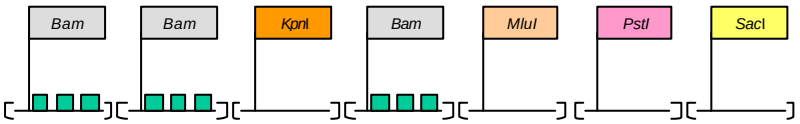
Monitoring gene-conversion events by performing the PCR-based “DNA -flag” test

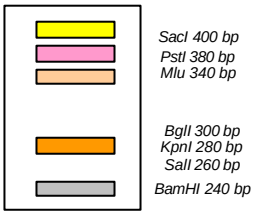


Gel image



Two successive rounds of gene conversion of the *Bam*HI amplicon to the *Sal*I and *Bgl*II





Additional rounds of gene conversion to occupy all Δ*gla*A amplicons with expression units