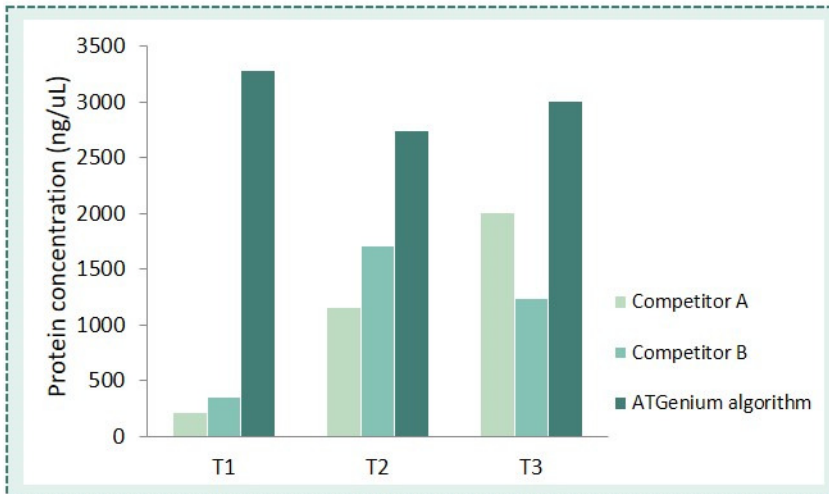
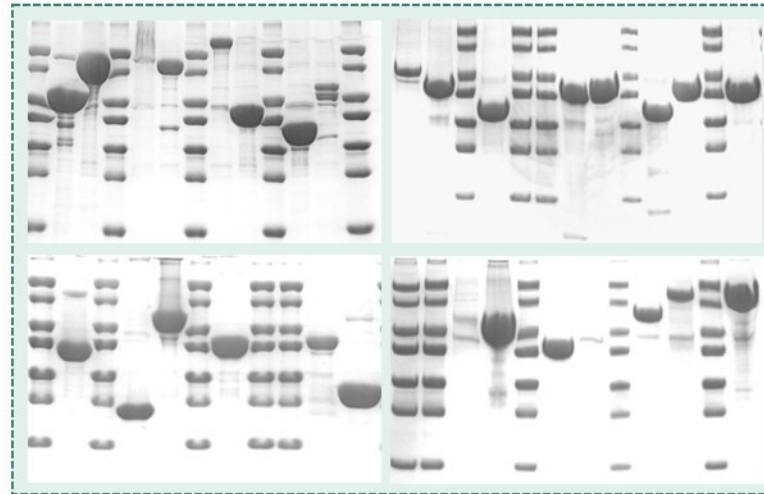


A**B**

A. Levels of protein expression of three different eukaryotic proteins in a prokaryotic system (*Escherichia coli*). The genes encoding these proteins were optimized by three algorithms for codons optimization, by two different competitors (light blue) and using the ATGenium codon optimization algorithm developed by NZYTech (dark blue).

B. High-throughput recombinant protein expression of CAZymes (Carbohydrate Active eNZymes). Genes encoding these proteins were optimized using ATGenium codon optimization algorithm, cloned into pHTP1 expression vector and overexpressed in *E. coli* BL21 (DE3). Recombinant proteins were purified through IMAC and separated by SDS-PAGE. High protein expression yields were obtained when genes were optimized using ATGenium.