Supplementary Figure 10 – schematic representation of *coAtANS* mutation in strains IMF41, IMF42, IMF44 and IMF47

**A)** The original coAtANS has a length of 1071 bp and encodes for an enzyme consisting of 356 amino acids. **B)** In strains IMF41, IMF42, IMF44 and IMF47, 21 nucleotides of non-homologous DNA (indicated in grey) together with 25 of the first 26 nucleotides of the *coAtANS* gene (indicated in dark green) were inserted right after the 26th nucleotide. **C)** This insertion resulted in a total insertion of 46 nucleotides disrupting the original ORF. However, this also resulted in a new ORF starting from the 284th nucleotide. **D)** The new ORF of the truncated coAtANS has a length of 834 bp and encodes for an enzyme consisting of 277 amino acids.

