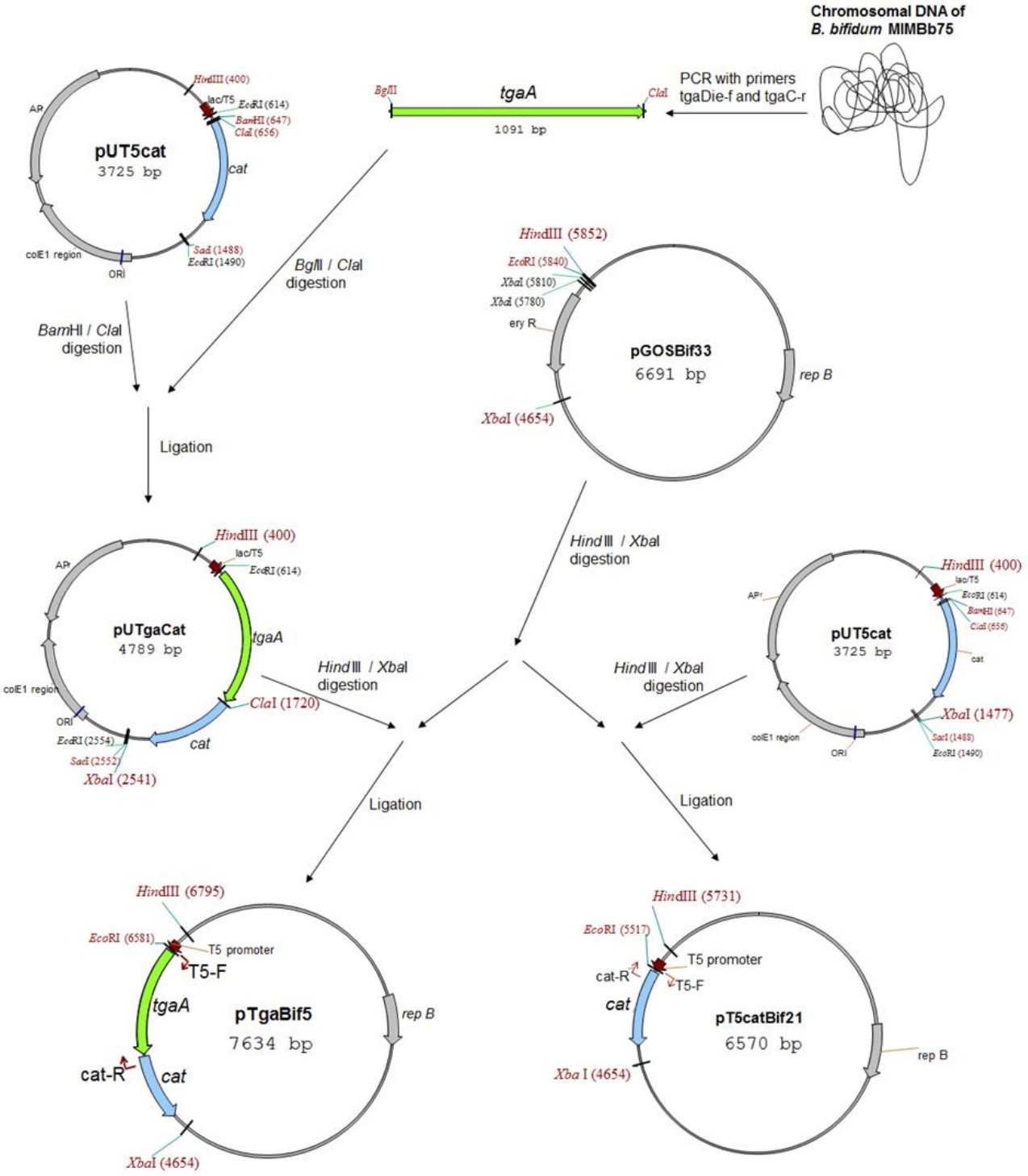
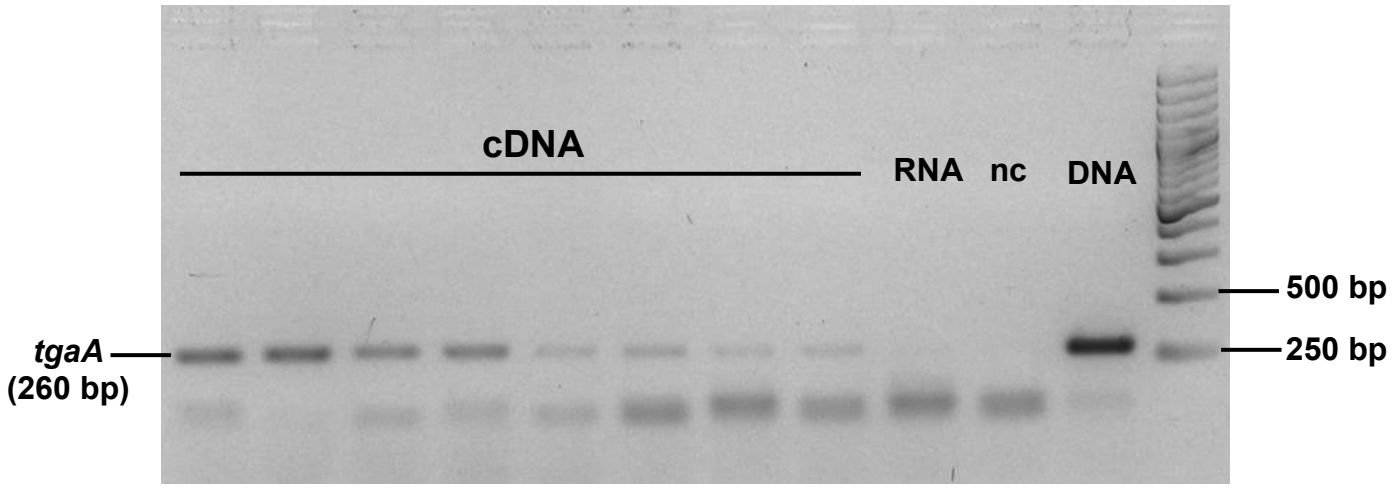
Supplementary Figure S1. Schematic representation of the steps carried out to prepare the recombinant vector employed for the expression of gene *tgaA* in *Bifidobacterium longum* NCC2705.



Supplementary Figure S2. Verification of *tgaA* gene expression by *B. longum* NCC:tga+ recombinant strain. A. RT-PCR experiment with primers B-7x and Bext-f-II carried out as describe in the material and methods section. For increasing concentrations in duplicate of cDNA were used in the reaction. Lane named "RNA" corresponds to non-retrotranscripted RNA sample; nc, PCR negative control; Lane named "DNA" corresponds to the positive control (genomic DNA from NCC:tga+ recombinant strain). B. Localization of recombinant TgaA protein in *B. longum* cells by immunogold labeling. Bacterial cells were probed with the ΔSP-TgaA-ΔLT-His antiserum followed by interaction with gold (12 nm)-conjugated goat anti-rabbit IgG and negatively stained. Panels a and b, *B. longum* NCC:tga+ recombinant strain; panels c and d, *B. longum* NCC2705 wild type strain. The arrows indicate positive staining of the strain NCC:tga+. Bacterial cells were visualized with a transmission electron microscope at a magnification of 23,000 - 60,000.

A



B