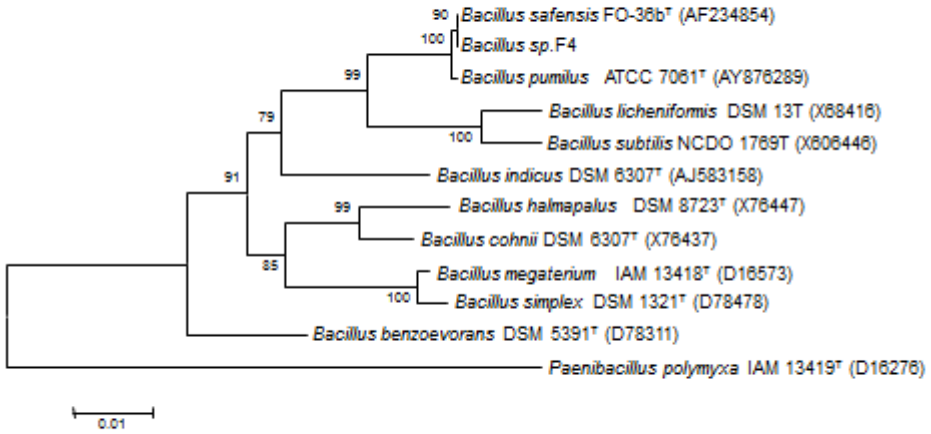

Figure 1: Neighbor-joining phylogenetic tree of *Bacillus safensis*F4 made by MEGA4.0. Sequence accession numbers are given in parentheses. Bar 0.01 nucleotide substitutions per site.

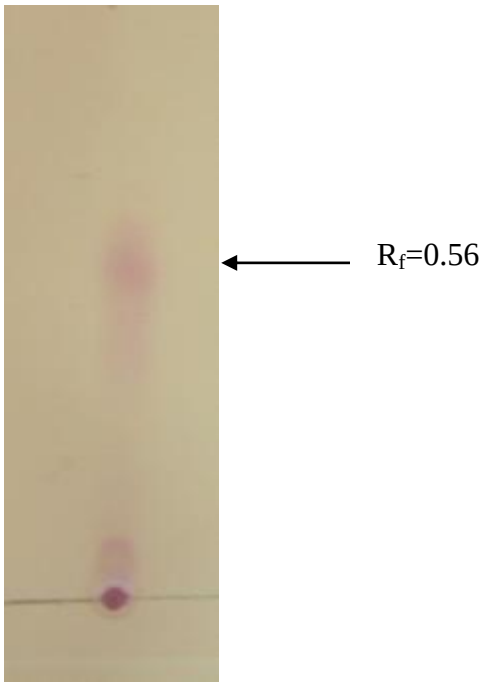

Figure 2: Thin Layer Chromatography of the crude biosurfactant.The silica gel development was carried out using a mobile phase of chloroform/methanol/water in the 65:25:4 ratio (v/v/v) and revealed with 0.25% ninhydrin. The pink spot indicates the presence of a lipopeptide with a relative front (R_f) of 0.56.

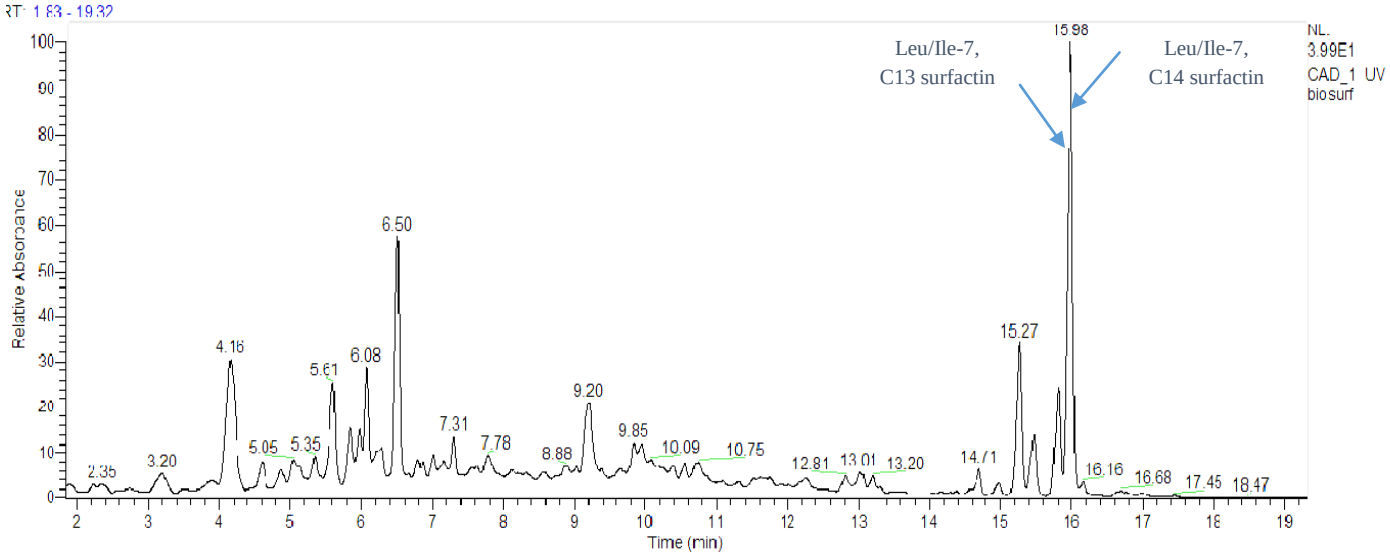

Figure 3:ESI-MS chromatogram of biosurfactants produced by*Bacillus safensis*F4. The blue arrows correspond to two surfactinderivateswere identified as Leu/Ile-7, C_{14}surfactin and Leu/Ile-7, C_{13}surfactin with different masses of 1021.66 m/z and 1007.65 m/z, respectively, at the same retention time of 15.98 min.

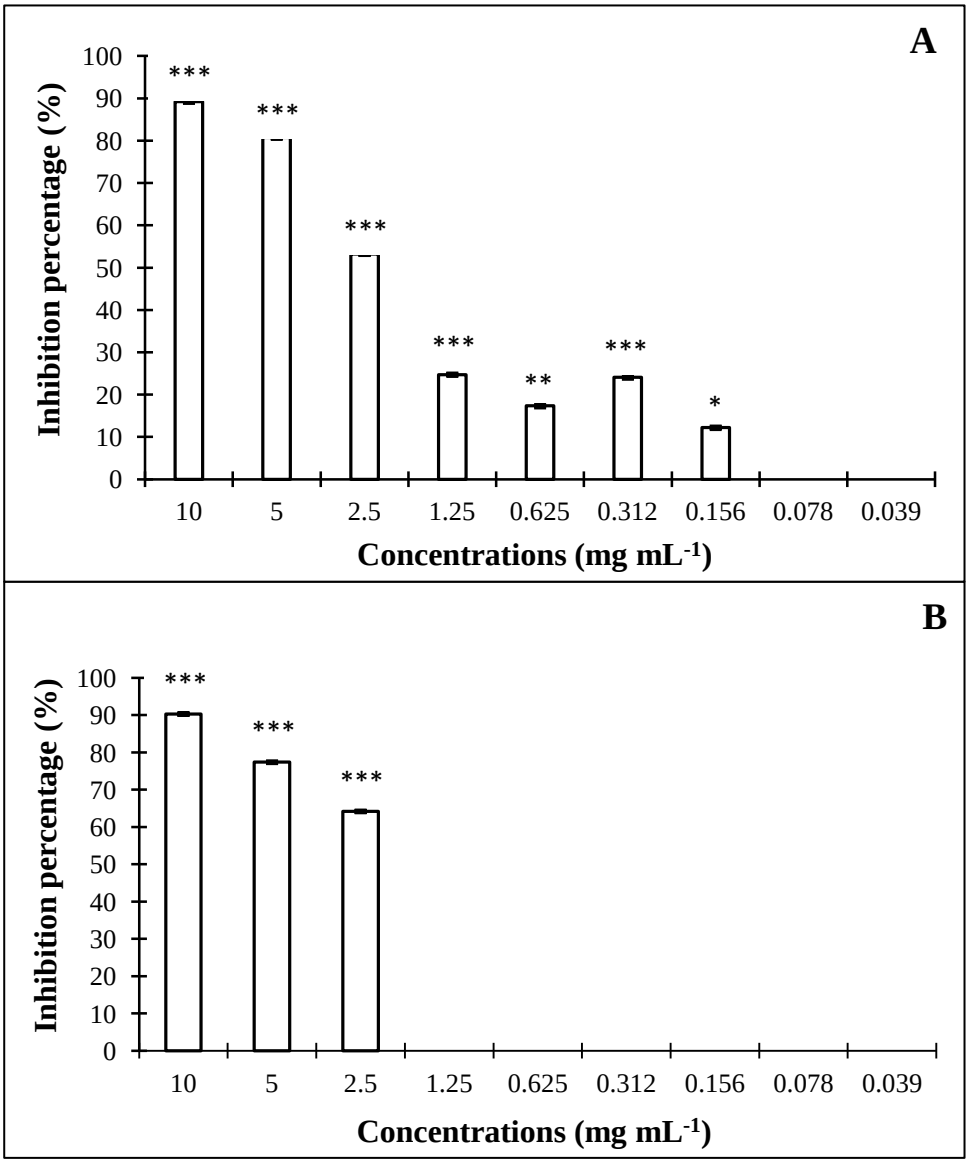

Figure 4: Anti-adhesive activity of the crude biosurfactant**(A)** and acetonitrile fraction **(B)** against *Staphylococcus epidermidis*S61.

P value was calculated by Test student.

***: $P<0.001$

**: $0.001 \leq P<0.01$

*: $0.01 \leq P<0.05$

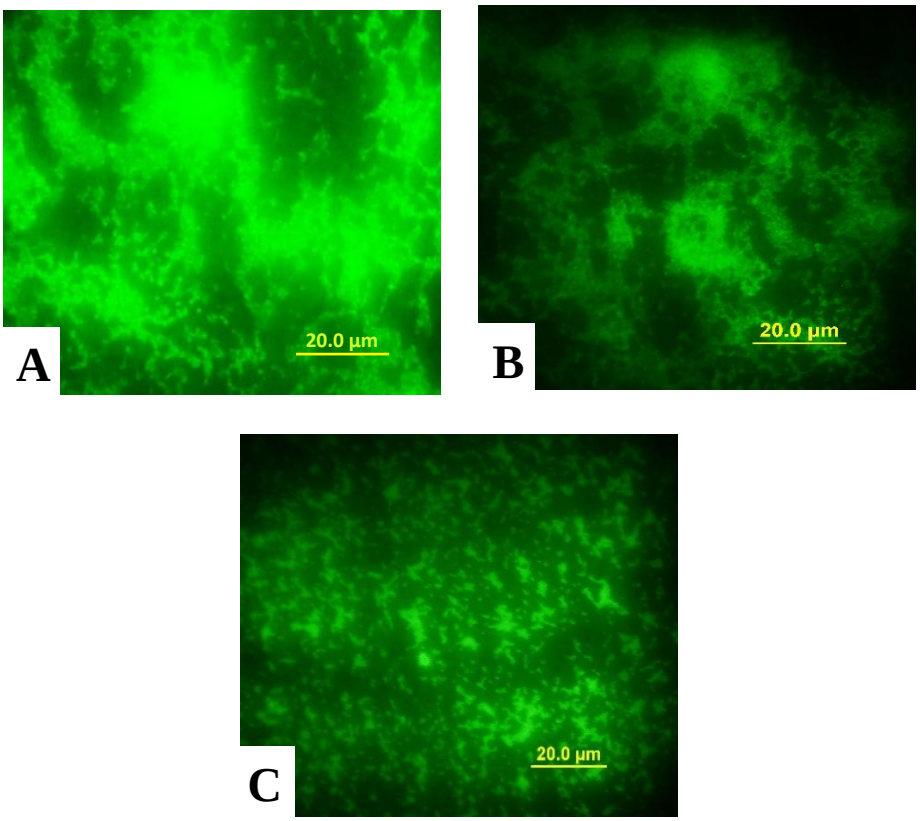

Figure 5: Fluorescence microscopy images (x40) of anti-adherence activity of the crude biosurfactant**(B)** and acetonitrile fraction **(C)**against *Staphylococcus epidermidis*S61comparedwith non-treated cover slips**(A)** (Treatment at 10 mg mL^{-1}).

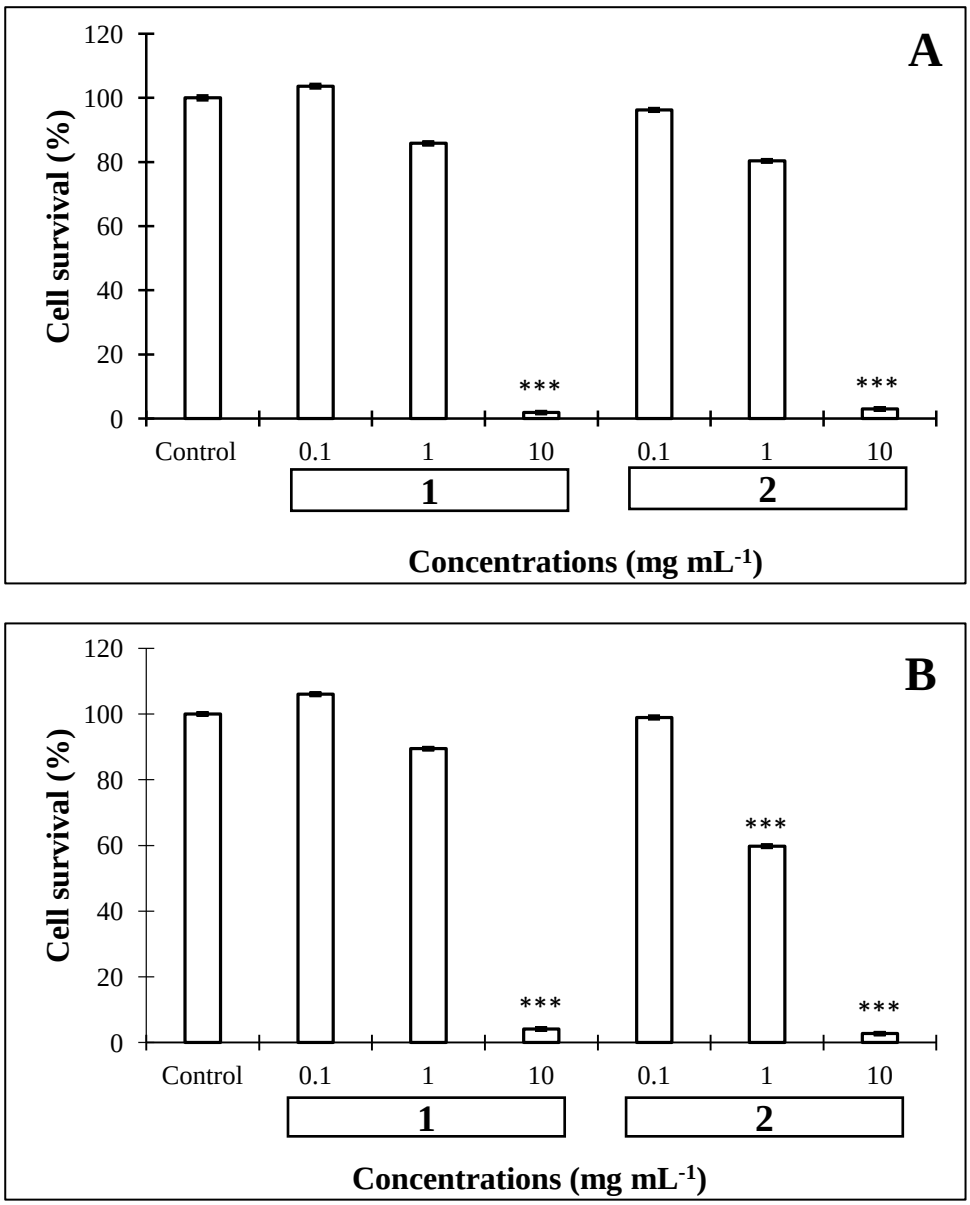

Figure 6: Preliminary anti-tumor assay of the crude biosurfactant**(1)** and acetonitrile fraction **(2)** against T47D breast cancer cells **(A)** and B16F10 mouse melanoma cells **(B).**

P value was calculated by Test student.

***: Significant($P<0.001$)

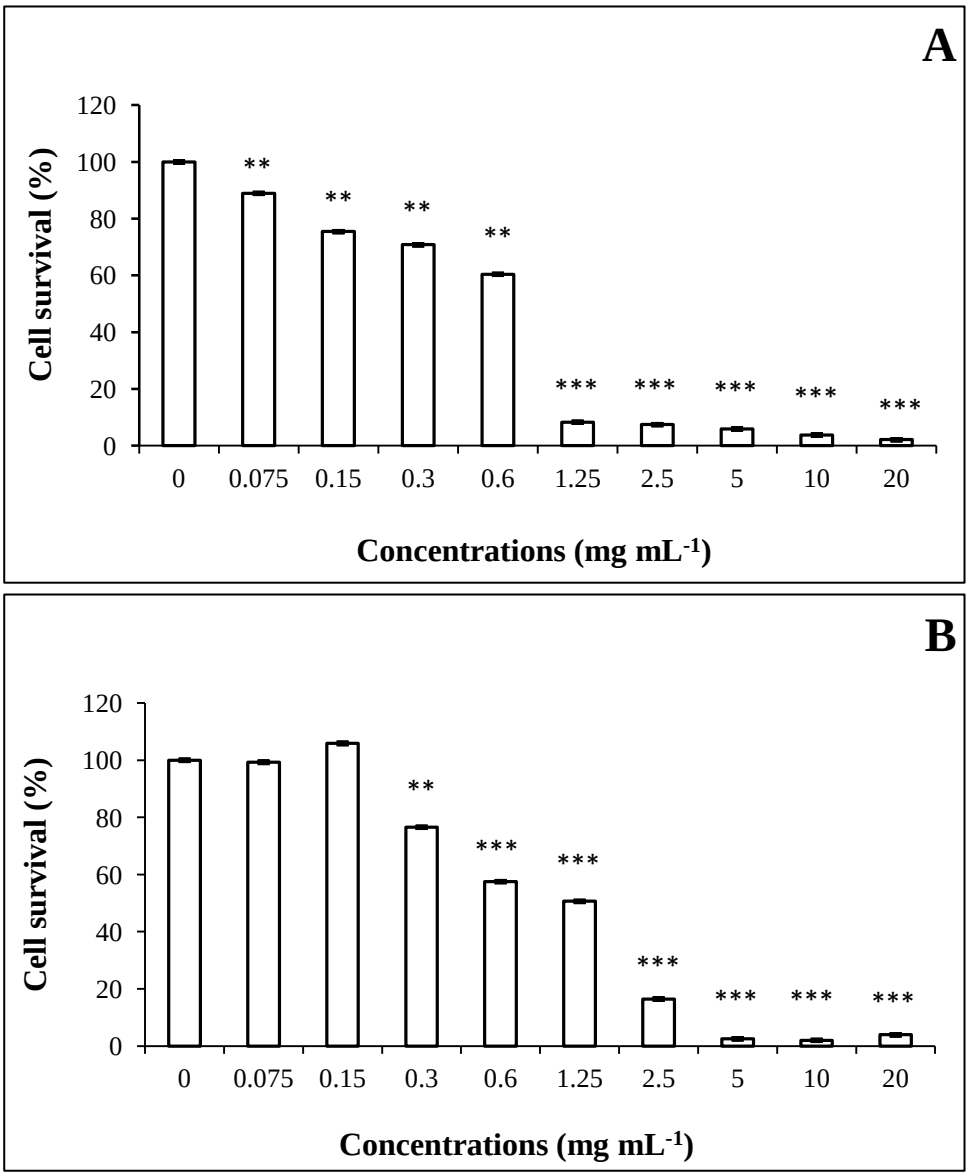

Figure 7: IC_{50} determination of the acetonitrile fraction against T47D breast cancer cells **(A)** and B16F10 mouse melanoma cells **(B).**

P value was calculated by Test student.

***: $P<0.001$

**: $0.001 \leq P<0.01$