SUMMARY

In one aspect, the present disclosure refers to a mutant strain of *Clostridium acetobutylicum* expressing *dhaB1*, *dhaB2* and *dhaT* genes from *C. butyricum* and comprising attenuated glycerol kinase activity.

In another aspect, the present disclosure refers to a consortium of *Clostridium* comprising the mutant strain as described herein.

In yet another aspect, the present disclosure refers to a method for the production of 1,3-propanediol and butyric acid comprising culturing the mutant strain or a consortium as defined herein, in an appropriate culture medium comprising at least glycerol and recovering the 1,3-propanediol and/or the butyric acid produced from the culture medium.