The aim of this study was to investigate the effect of r-insulin in SF9 cell cultures growing in SF CD medium. An initial phase of adaptation to different r-insulin concentration was performed prior to experimentation. The first part focused on the evaluation of r-insulin as a supplement for cell growth and viability maintenance. In the second part, r-insulin was investigated as an enhancer for HIV-1 Gag VLP production through baculovirus infection (BV). The Gag gene was fused in frame to eGFP to ease process characterization and product quantification.

**CONCLUSIONS**

- A 1.1-fold reduction in dt1/2 was achieved with 1 mg/L r-insulin supplementation
- A 1.2-fold improvement in maximal viable cell concentration was obtained with 1 mg/L r-insulin
- A 1.2-fold increase in VLP production was attained with 1 mg/L r-insulin

**REFERENCES**


**ACKNOWLEDGEMENTS**

The insulin used in this work was kindly provided by Novo Nordisk Pharmatech A/S (Køge, Denmark). Fruitful discussions with Sara Gualdoni and Vanessa León are acknowledged.