

**Molecular Biotechnology Programme** 

Uppsala University School of Engineering

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Title (English)

## Developing a cross-linked hyaluronic acid microparticle system for protein encapsulation

Title (Swedish)

Abstract

Author

The aim of this study was to develop a microparticle system optimal for protein drug delivery. The protein was first encapsulated in liposome nanoparticles and thereafter in cross-linked hyaluronic acid microparticles. Characterization of these particles showed this method to be milder on protein stability than conventional Microencapsulation methods. Although release kinetics, protein loading and the biocompatibility remain to be optimized, this microparticle system appears to be a promising delivery vehicle for proteins.

Keywords

Drug-delivery, microparticle, liposome, hyaluronic acid, protein stability, biocompatibility

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