UPPSALA UNIVERSITET

Molecular Biotechnology Programme

Uppsala University School of Engineering

UPTEC X 13 003	**Date of issue 2013-02**

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Title (English)

Evaluation of flow cytometry as replacement for plating in *in vitro* measurements of competitive growth under antibiotic stress

Title (Swedish)

Abstract

A method for measuring cell concentration and identity based on flow cytometry (FCM) and fluorescent marking is developed and subsequently compared with traditional plating based methods, with regards to performance, economy and ergonomy. The emphasis is on competitive growth of bacteria under antibiotic stress, but the technique could be used in any situation requiring fast, high throughput counting and identification of cellular populations. The method needs further development, but shows potential as a parallelizable and fast alternative to plating.

Keywords

Flow cytometry, FCM, fluorescent marker, plating, competitive growth, antibiotic stress

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Project name	Sponsors
Language **English**	Security
ISSN 1401-2138	Classification
Supplementary bibliographical information	Pages **44**

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