UPPSALA UNIVERSITET

Molecular Biotechnology Programme

Uppsala University School of Engineering

UPTEC X 14 023	**Date of issue 2014-08**

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Title (English)

Purification and characterization of storage proteins from kiwi seeds

Title (Swedish)

Abstract

Kiwi allergy is a common food allergy and the symptoms can vary from mild to severe allergic reactions. In this project, storage proteins from kiwi seeds have been purified and characterized with biochemical and immunological methods. Storage proteins in nuts are known to cause life threatening allergic reactions and the suspicion was that storage proteins in kiwi seeds might cause severe allergic reactions as well. The purified components were identified and characterized using MALDI-TOF, SDS PAGE and analytical gel filtration. The purified components were analysed with serum samples from kiwi allergic individuals by the ImmunoCAP system, which measures the concentration of IgE-antibodies against specific allergens in serum samples. The results indicate that individuals with severe kiwi allergy are sensitized towards storage proteins in kiwi seeds.

Keywords

Storage protein, allergy, kiwi seeds, ImmunoCAP, IgE, component resolved diagnostics

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Project name	Sponsors
Language **English**	Security **Secret until 2024-08**
ISSN 1401-2138	Classification
Supplementary bibliographical information	Pages **50**

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