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Expression of human lactoferrin cDNA in tomato plant

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Objectives

The aim of this study was to develop transgenic tomato plants expressing human lactoferrin (hLF) cDNA.

Materials and Methods

1. Material : Plant material - tomato plants (*Lycopersicon esculentum*)
Agrobacterium tumefaciens EHA 105
2. Methods : PCR, Southern and Western blot analyses

Results and Discussion

In order to confirm the presence of a hLF cDNA, PCR and Southern blot analyses were performed. The results showed that the hLF cDNA was inserted into transgenic tomato plants. Expression of the hLF cDNA was confirmed by Western blot analysis. The transgenic tomato plants were produced hLF with a molecular weight of about 80 kDa.



Fig 1. Western blot analysis of transgenic tomato plants.

P, commercially available hLF (200 ng, Sigma); N, protein extract from non-transgenic; lanes 1-5, protein extracts from transgenic plants.