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Author	Sofia Stenler	
Title (English)	Construction of VEGF-encoding mini-circle plasmid and development of a semiquantitative RT-PCR measuring VEGF-mRNA	
Title (Swedish)		
Abstract	Bacterial sequences in plasmid-based vectors for gene therapy are believed to inhibit long-term gene expression. In this master thesis, a novel recombination method was used to produce a mini-circle plasmid consisting of the expression cassette for hVEGF. The expression of hVEGF from this plasmid, devoid of bacterial sequences, was compared to that of an existing hVEGF-plasmid using ELISA. The mini-circle proved to have an equal or possibly better expression of hVEGF. A method for measuring VEGF-mRNA levels in cotransfected cells with a semiquantitative RT-PCR was developed.	
Keywords	Gene therapy, plasmid based vectors, mini-circles, hVEGF, semiquantitative RT-PCR	
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