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Author	Susanna Lewén	
Title (English)	A DNA minigene vaccine encoding Legumain epitopes suppresses cancer growth	
Title (Swedish)		
Abstract	<p>Here two DNA minigene vaccines against the protein Legumain over-expressed by cancer cells were constructed to suppress growth and metastasis of cancer. The two epitope-based minigenes, each encoding three different epitopes of Legumain, separated by a spacer sequence, were targeted to the endogenous Ag presenting pathway for MHC class I-restricted CD8⁺ T-cell to mediate tumor cell killing via an ER targeting signal. This Legumain based minigene vaccine was delivered orally by a bacterial carrier system of doubly attenuated <i>S. typhimurium</i> (<i>aroA</i>⁻ and <i>dam</i>⁻) and immunized mice were lethally challenged with breast and lung carcinoma cells. The specifically induced immune response partially protected mice from growth of primary subcutaneous tumors and suppressed dissemination of pulmonary metastases.</p>	
Keywords	DNA vaccine, minigene, Antigen (Ag), MHC class I, Legumain, Spacer, ER, CTL/CTL-assay	
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