Therapeutics & Vaccines

Mini-Intronic Plasmid Dna Vaccines In Combination With Lag3 Blockade

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The Invention

It is disclosed herein that (a) an anti-tumor DNA vaccine delivered using a MIP DNA vector is a less effective tumor treatment than the corresponding anti-tumor DNA vaccine delivered using a conventional pDNA vector, despite the MIP DNA vector eliciting a higher frequency of antigen-specific CD8+ T cells; and (b) tumor infiltrating CD8+ T cells in animals immunized with the MIP DNA vector express higher levels of the immune checkpoint protein LAG-3 than animals immunized with a conventional pDNA vector, while the expression levels of other immune checkpoint proteins was the same for both groups. Based on these findings, improved methods and compositions for administering DNA vaccines are disclosed. Specifically, DNA vaccines delivered with MIP DNA are administered along with a LAG-3 pathway blocking agent, resulting in a more effective vaccine-induced cellular immune response.

Additional Information

For More Information About the Inventors

- Douglas McNeel

Tech Fields

- Therapeutics & Vaccines : Vaccines

For current licensing status, please contact Andy DeTienne at adetienne@warf.org or 608-960-9857