

228 Universal Cancer Vaccine Candidate

► Asset Overview

Product Type	Oncolytic VSV with Lassa-derived glycoprotein (Gene Therapeutic)
Indication	Oncology
Current Stage	Preclinical
Target (MoA)	Tumor antigen binding and phagocytosis via genetically reprogrammed macrophage
Brief Description	Unlike other vaccine-based technologies, OCR 5120 is not cancer-type specific, but a “panvaccine” antigen. The human immune system can respond to OCR5120 and identify the specific immunogenic epitopes derived from the OCR5120 antigen (see figure) as a matter of surveillance rather than response. OCR5120 targets factor that is important in self-renewal and maintenance of pluripotency in embryonic stem cells.
Organization	Yale University

► Differentiation

□ Unmet Needs

- Most healthy humans harbor OCT4-specific memory T cells that are readily detectable in freshly isolated peripheral blood mononuclear cells (PBMCs) and that an OCT4-specific response is detected in patients undergoing curative therapy for germ-cell tumors (GCTs). Thus, a functional OCT4-specific immune response is needed to treat a disease associated with over-expression of OCT4

□ Innovations

- The present invention may also provide methods for treating or preventing a condition associated With tumorigenicity relating to stem cell based therapies
- The method comprises administering an antigen presenting cell (APC) that specific cally induces proliferation of a T cell specific for OCT4. Once sufficient numbers of antigen-specific T cells are obtained using the APC to expand the T cell, the antigen-specific T cells so obtained are administered to the mammal, thereby inducing a T cell response to the OCT4 in the mammal

► Key Data

Folate ligand improves liposomal adenovirus uptake

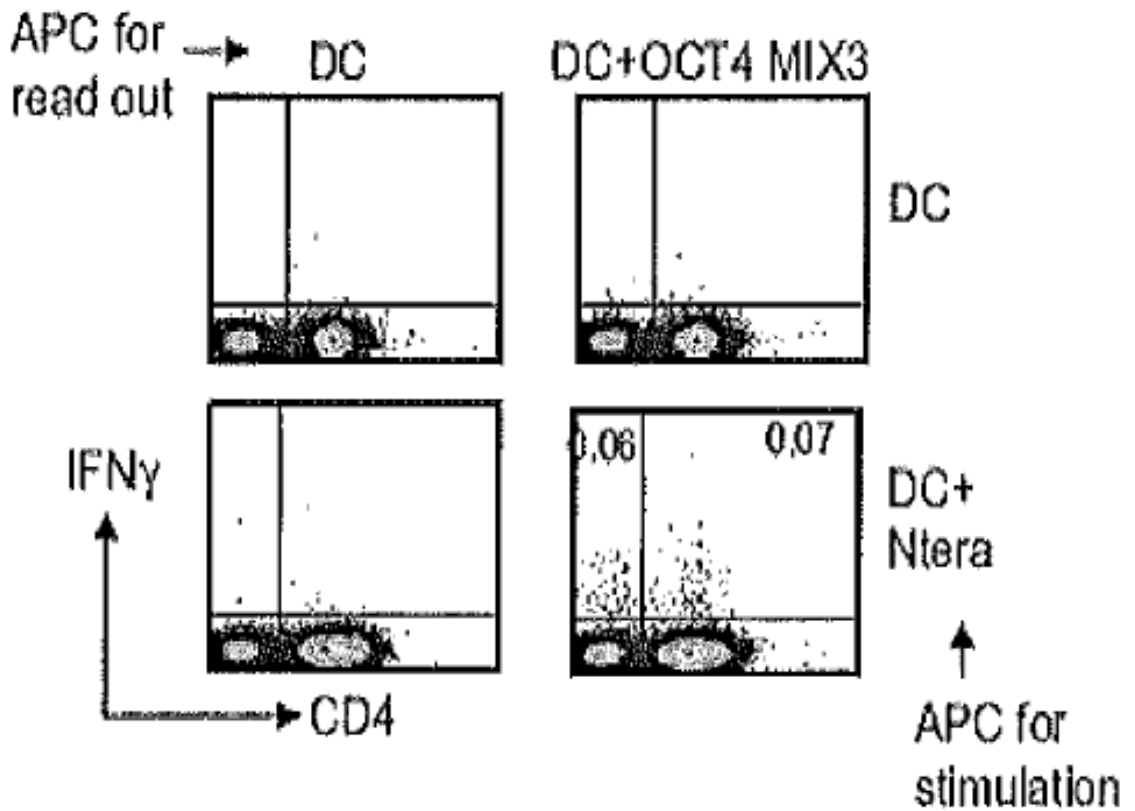


FIG. 6 is an image depicting induction of OCT4 specific T cells by tumor-loaded dendritic cells (DCs). Monocyte-derived DCs alone (DC) or fed with irradiated embryonal carcinoma (Ntera) cells (DC+Ntera), and used to stimulate autologous T cells. Induction of OCT4-specific T cells was monitored using intracellular cytokine flow cytometry in response to autologous DCs alone or loaded with OCT4 peptide Mix 3.

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► Intellectual Property

Patent No.	US 9808504 B2
Application Date	2010.09.22
Status	Registered
Country	US

► Contact Information

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