

ABSTRACT

The present invention relates to an immunoprophylactic and therapeutic vaccine comprising peripheral blood mononuclear cells loaded with a natural killer T cell ligand and an antigen, and specifically, to an immunotherapeutic vaccine comprising peripheral blood mononuclear cells loaded with alpha-galactosylceramide, a natural killer T cell ligand and a type of glycolipid.

10 A composition of the present invention is easy to obtain because there is no need to separate specific cells from peripheral blood mononuclear cells. In addition, immunization of peripheral blood mononuclear cells loaded with a natural killer T cell ligand and an

15 antigen not only induces significant levels of activation of natural killer cells and natural killer T cells and cytotoxic T lymphocyte responses, but also has a synergistic effect in the treatment of malignant tumors and thus can be helpfully used as an anticancer

20 immunotherapeutic agent.