

## ABSTRACT

Provided is a method for reducing or eliminating allograft rejection by using a thymus vaccine. The method comprises the following steps: expressing major histocompatibility complex (MHC) from a donor and/or grafting a thymus epithelial cell from a donor in the thymus tissue of a recipient by means of the thymus vaccine. The thymus vaccine includes a thymic gene vaccine and/or a thymocyte vaccine. The thymic gene vaccine is used for expressing an MHC antigen from the donor in the thymus of the recipient, and comprises: (1) a gene expression vector; and (2) polynucleotides separately encoding MHC class I molecules and MHC class II molecules of the donor. The thymocyte vaccine is prepared by the following steps: sorting by using an anti-Epcam antibody to give thymus epithelial cells. By establishing a convenient donor source, the limitations of allograft caused by MHC mismatch are overcome, thus helping solve the clinical problem of limited donor sources.

[No figure]