

ABSTRACT

NK cells are large granular lymphocytes and they are part of the innate immune system. In defense against tumor or virus-infected cells they activate their cytotoxic mechanisms and by production of cytokines NK cells can mobilize assistance in form of adaptive immune response. They create a large area of interest because of finding of ligands to their receptors and understanding these interactions can lead to significant discoveries. In particular, in medicine, where it can be applied i.a. for transplantation, in the fight against tumors or HIV. This thesis focuses on NKR-P1A receptor, which belongs to NKR-P1 family with other six receptors. This protein is activation receptor and recently its novel isoform was discovered. New isoform differs in transmembrane domain, whose considerable part is lacked. Aim of the thesis was prepare production plasmid encoding mNKR-P1A ISO2 followed by test of expression.