

Abstract

NK cells, the cells of non-adaptive immune system, are able to recognise virally infected or oncogenic cells by many inhibiting and activating receptors that are expressed on their surface and eliminate them consequently. For NKp30, activating receptor of NK cells included in NCR (Natural Killer Cell Receptors) family, lately there were identified several ligands, including membrane protein B7-H6 expressed on oncogenic cells surface and BAG-6, cell core protein with wide spectrum of functions.

Aim of this thesis was preparation of expression vectors coding for receptor NKp30 and his ligands B7-H6 and BAG-6, enabling expression of these proteins in HEK293 cell line.

Keywords: NK cell, plasmid, receptor, NKp30, B7-H6, BAG-6