

Mouse NK cell receptors belonging to NKR-P1 family plays role in activation, inhibition and cytokine secretion by these cells. Aim of this thesis is preparation of extracellular parts of C57BL/6 mouse strain activating receptors mNKR-P1A and mNKR-P1C. Production vectors with coding sequences of both proteins were prepared. Next, optimization of production in *E. coli* was done and appropriate in vitro refolding and purification protocol were developed. Purified proteins were characterized by mass spectrometry and labeled by a fluorescent dye. Primary screening for potential ligand was performed. Further work will involve structural characterization of the receptors and identification of their ligands. These data may help to clarify the function of NK cells.